

FIG. 1

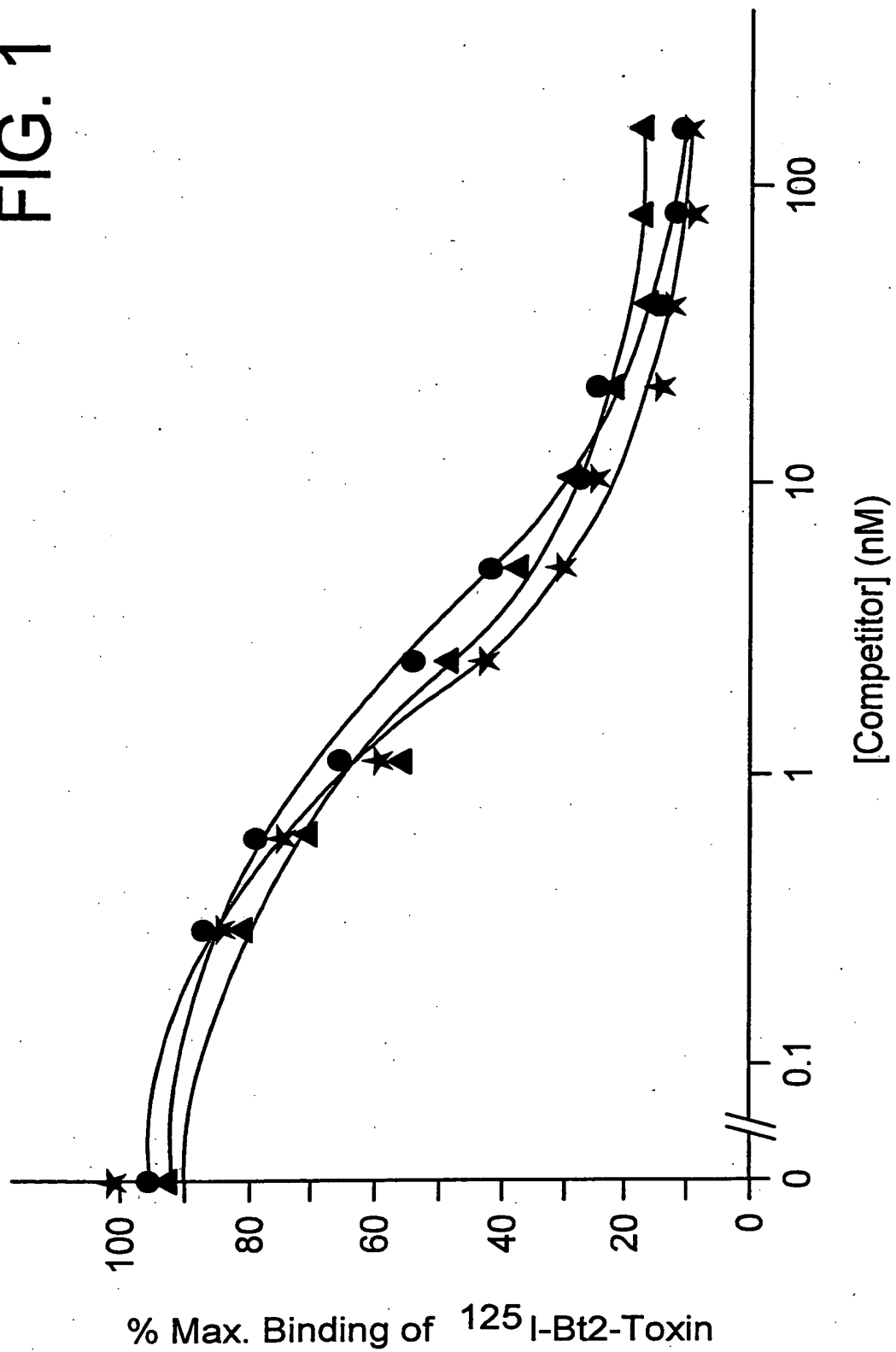


FIG. 2

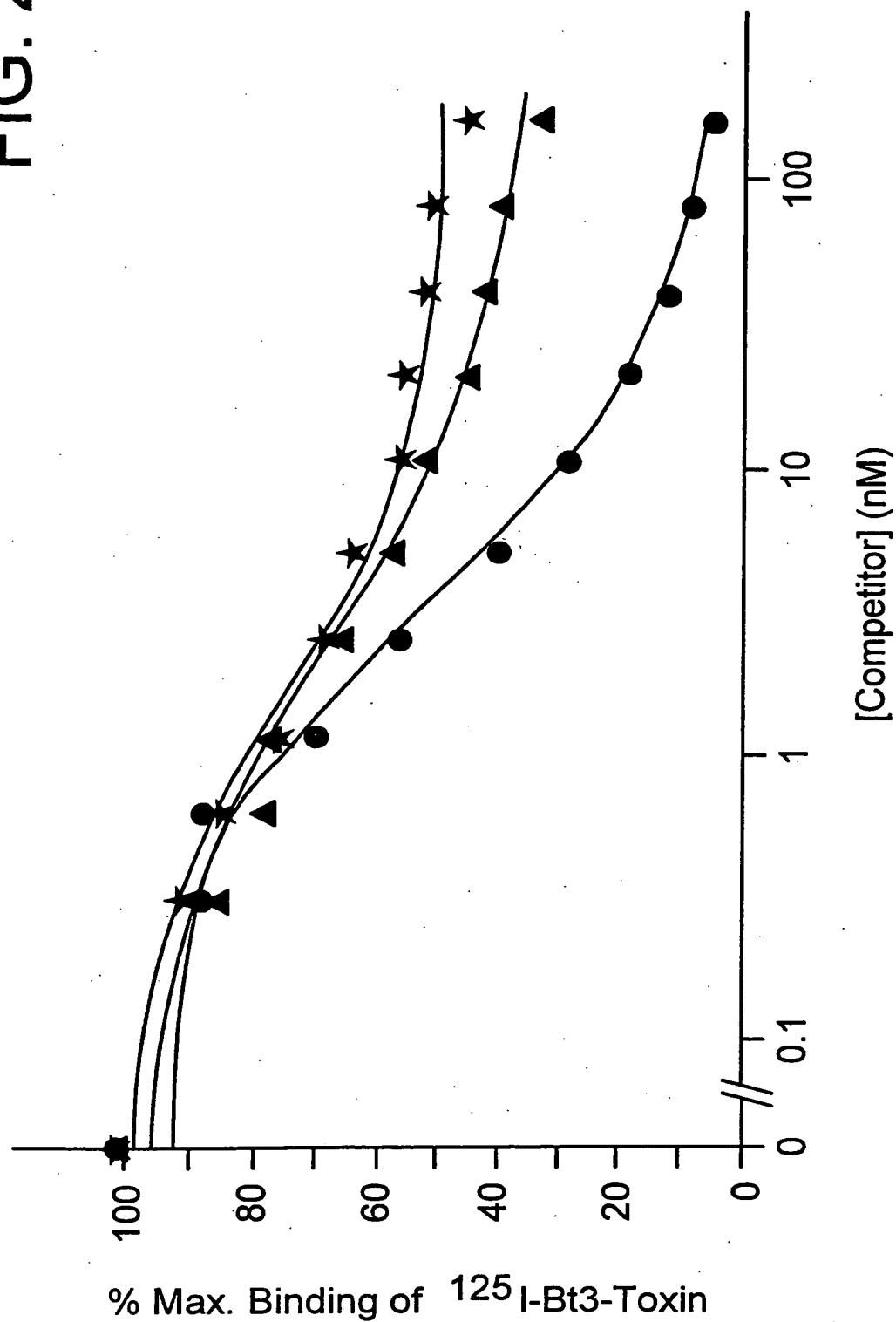


FIG. 3

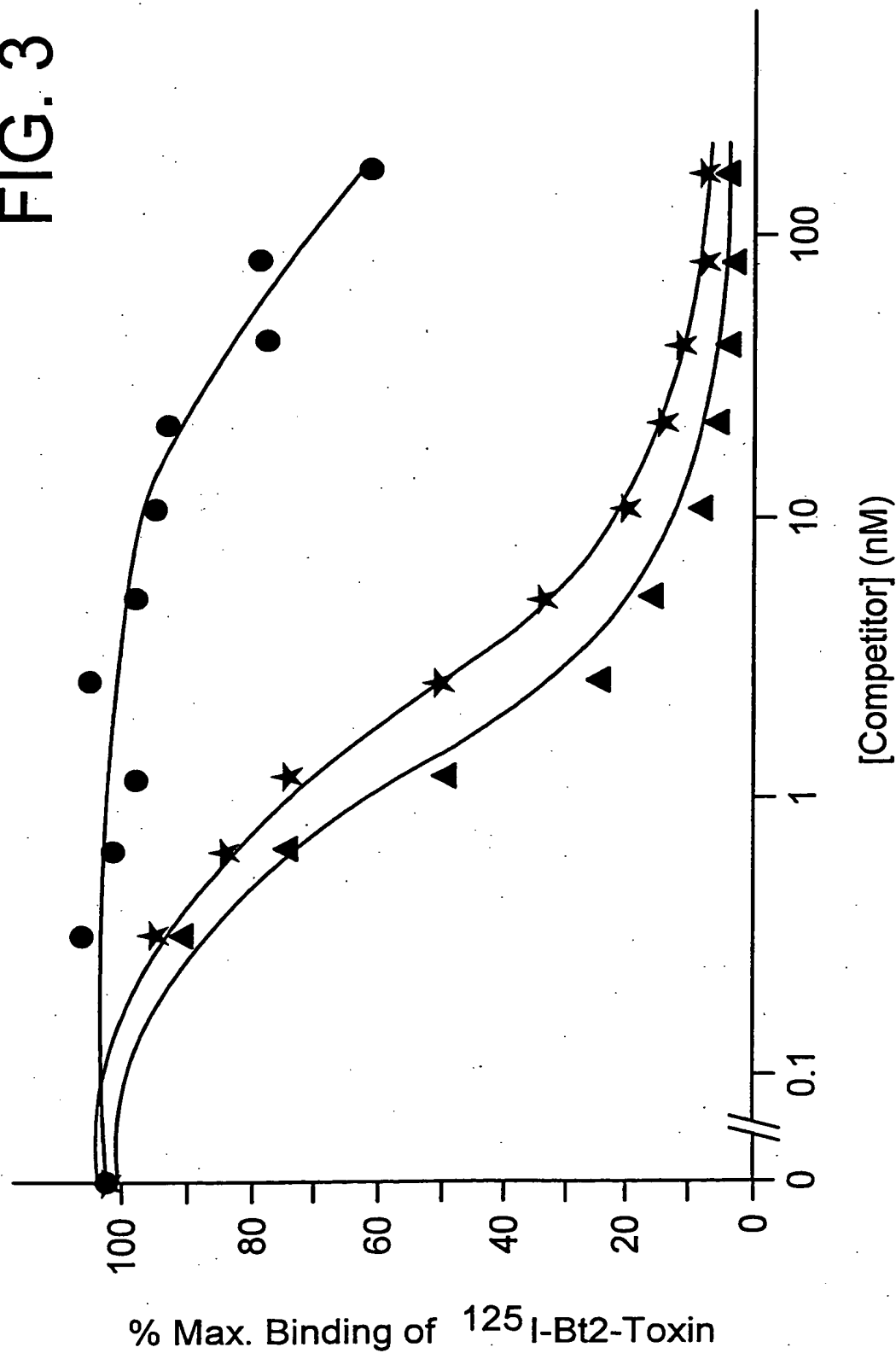


FIG. 4

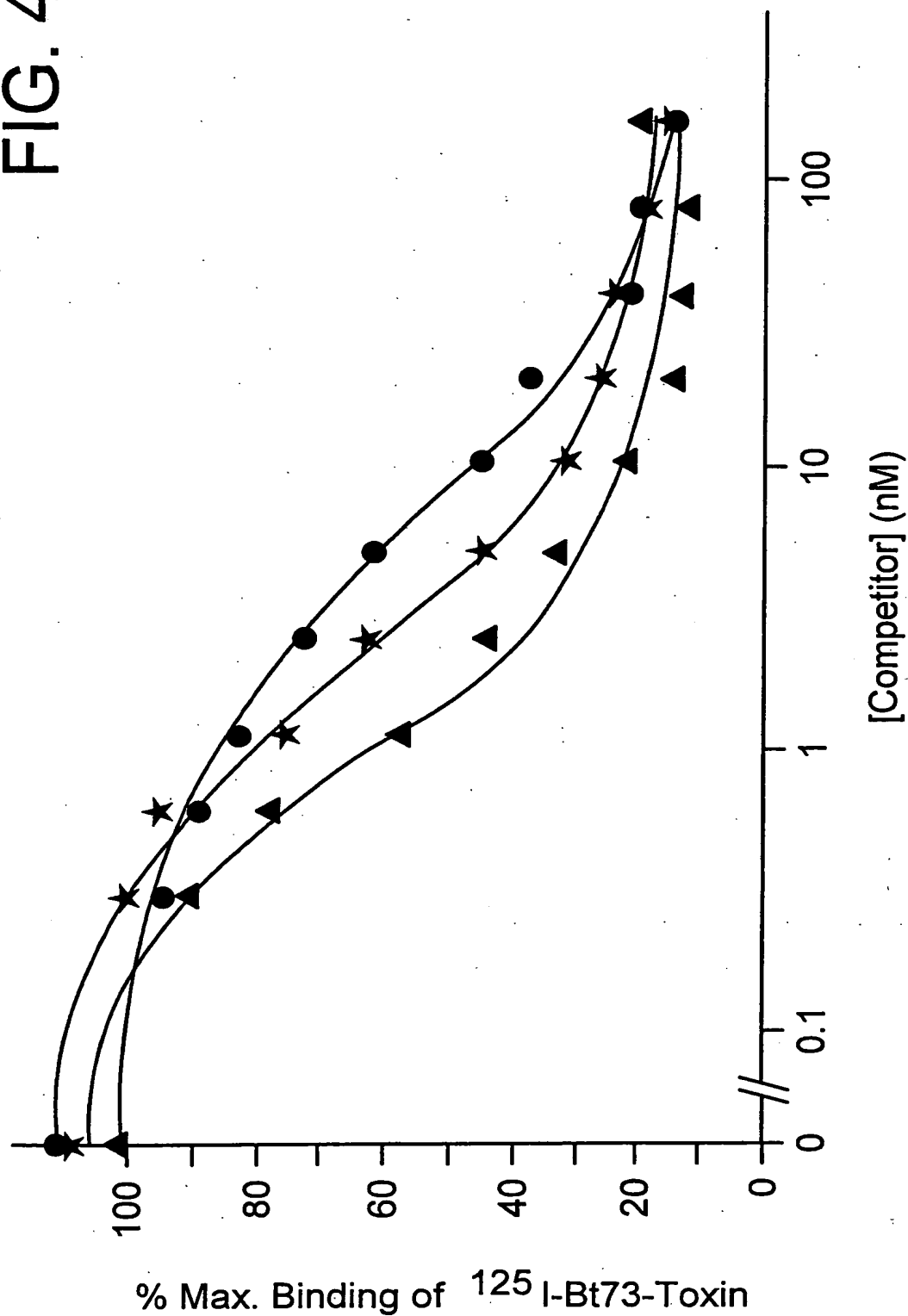


FIG. 5

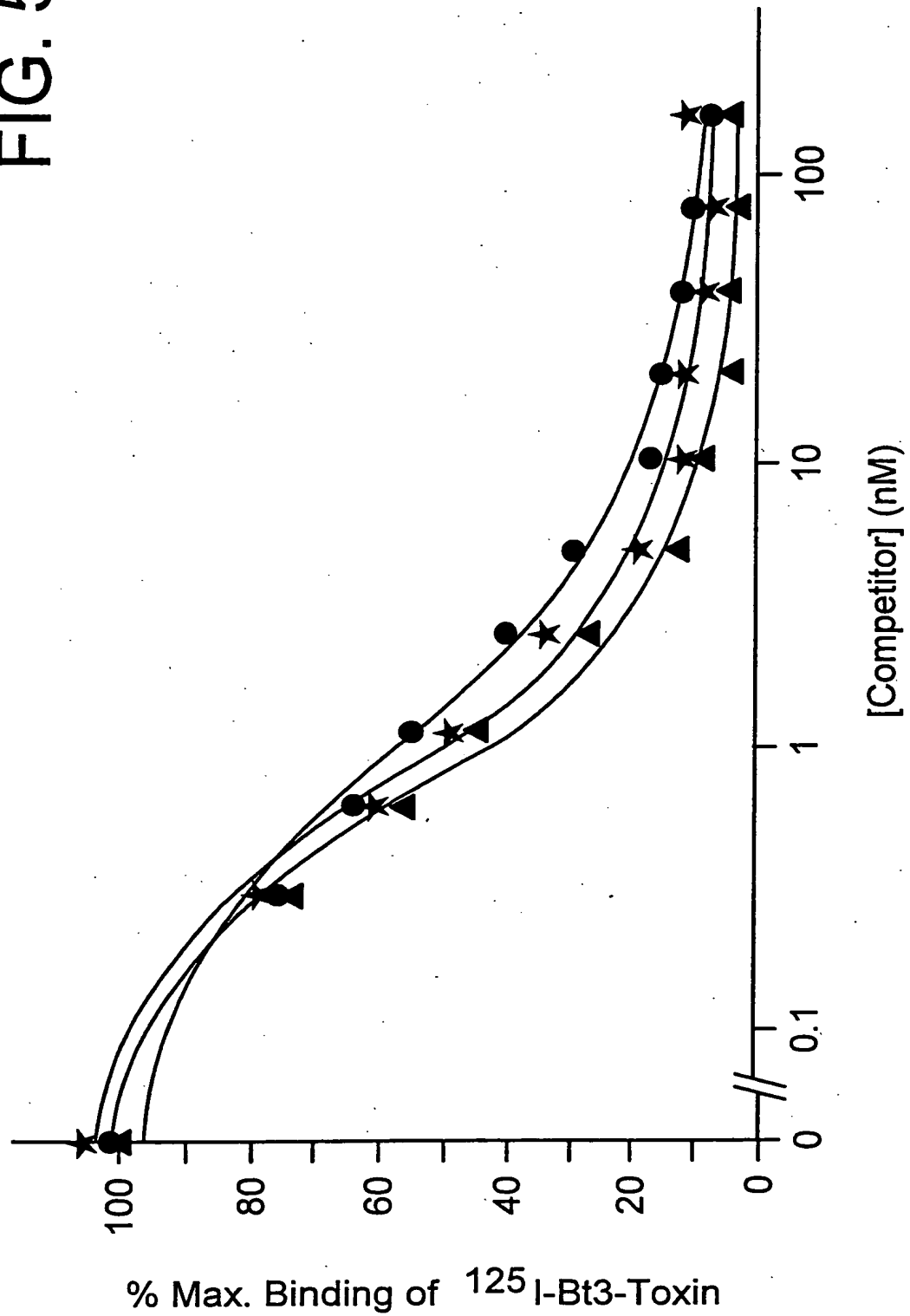


FIG. 6

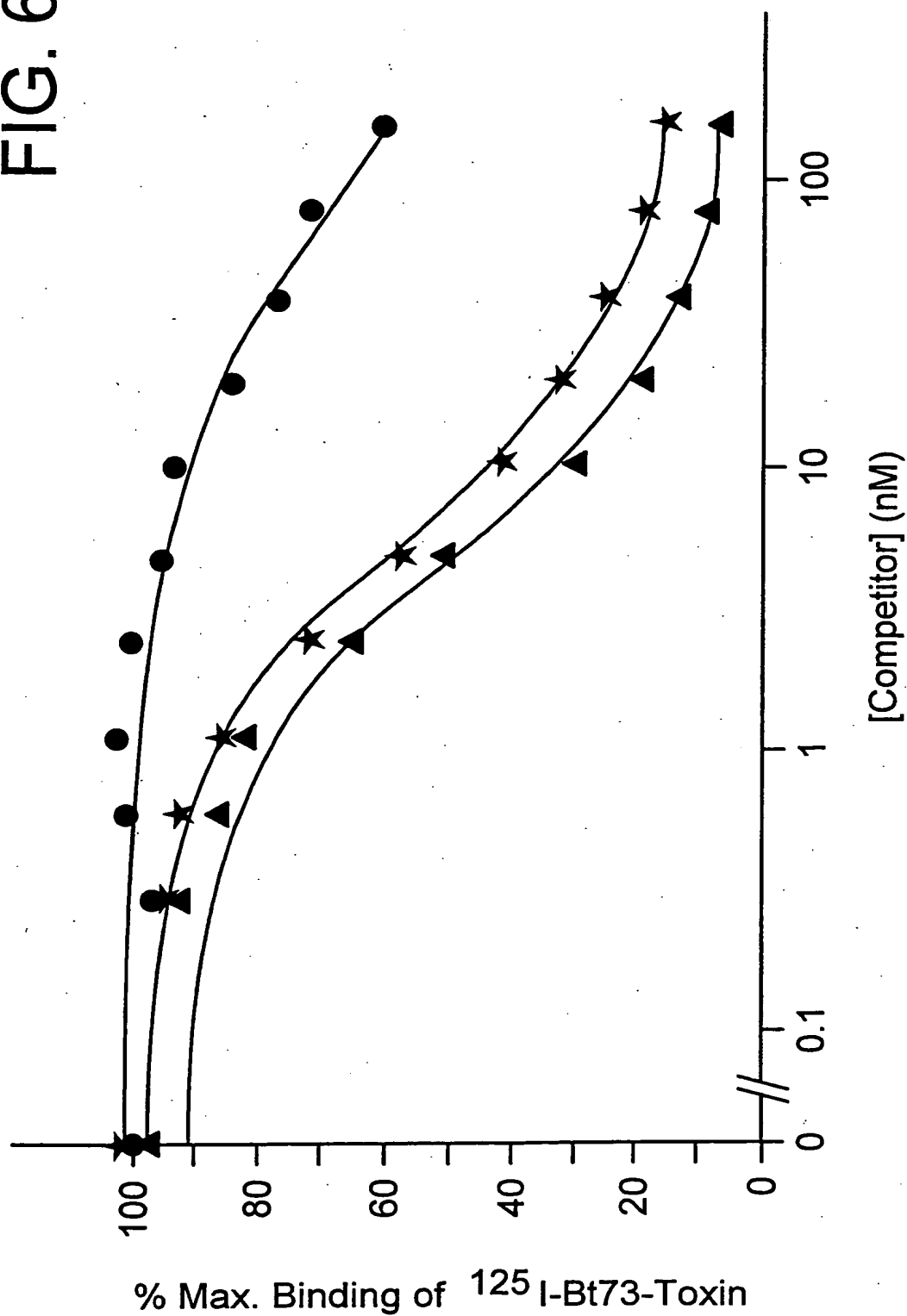


FIG. 7

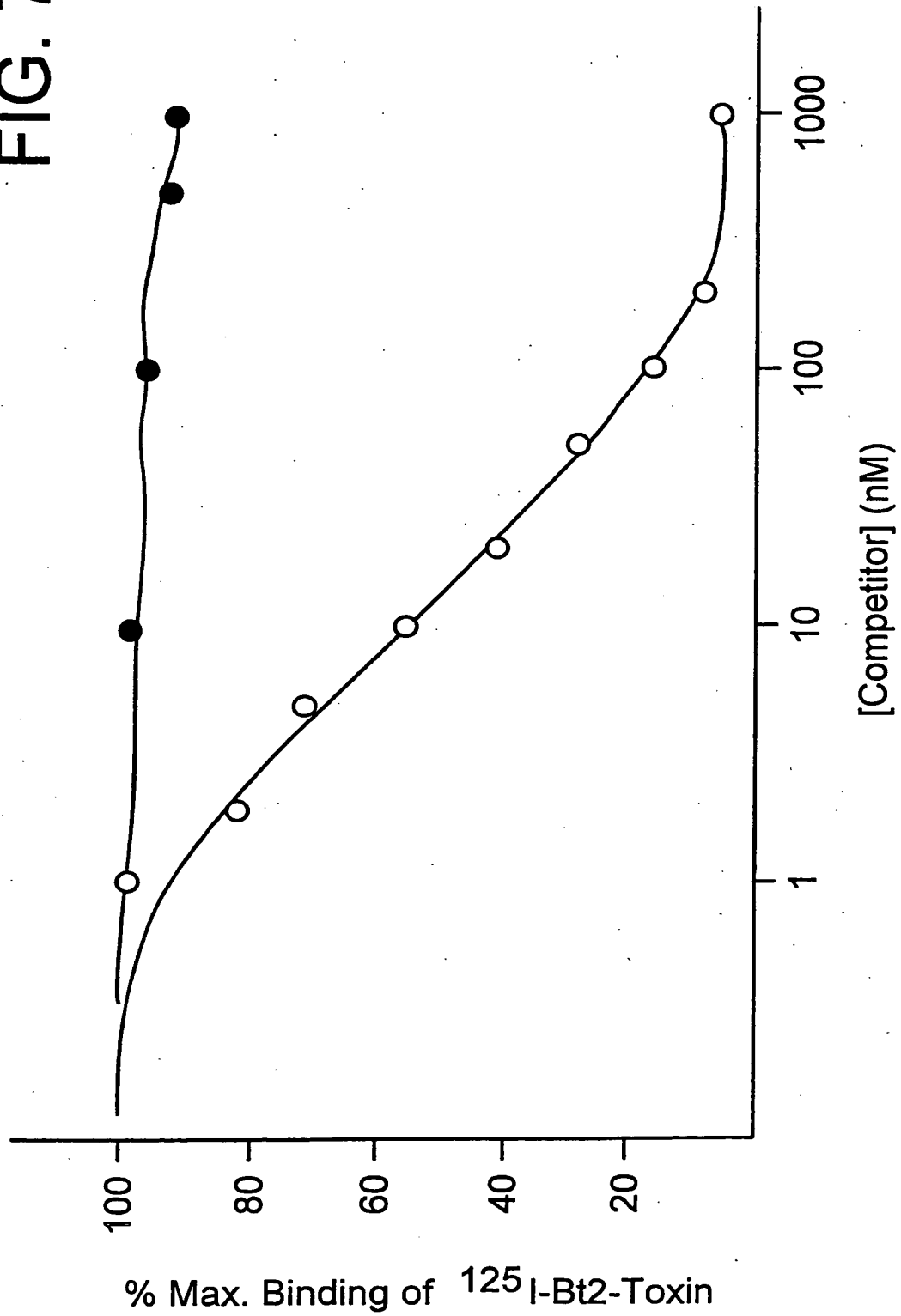


FIG. 8

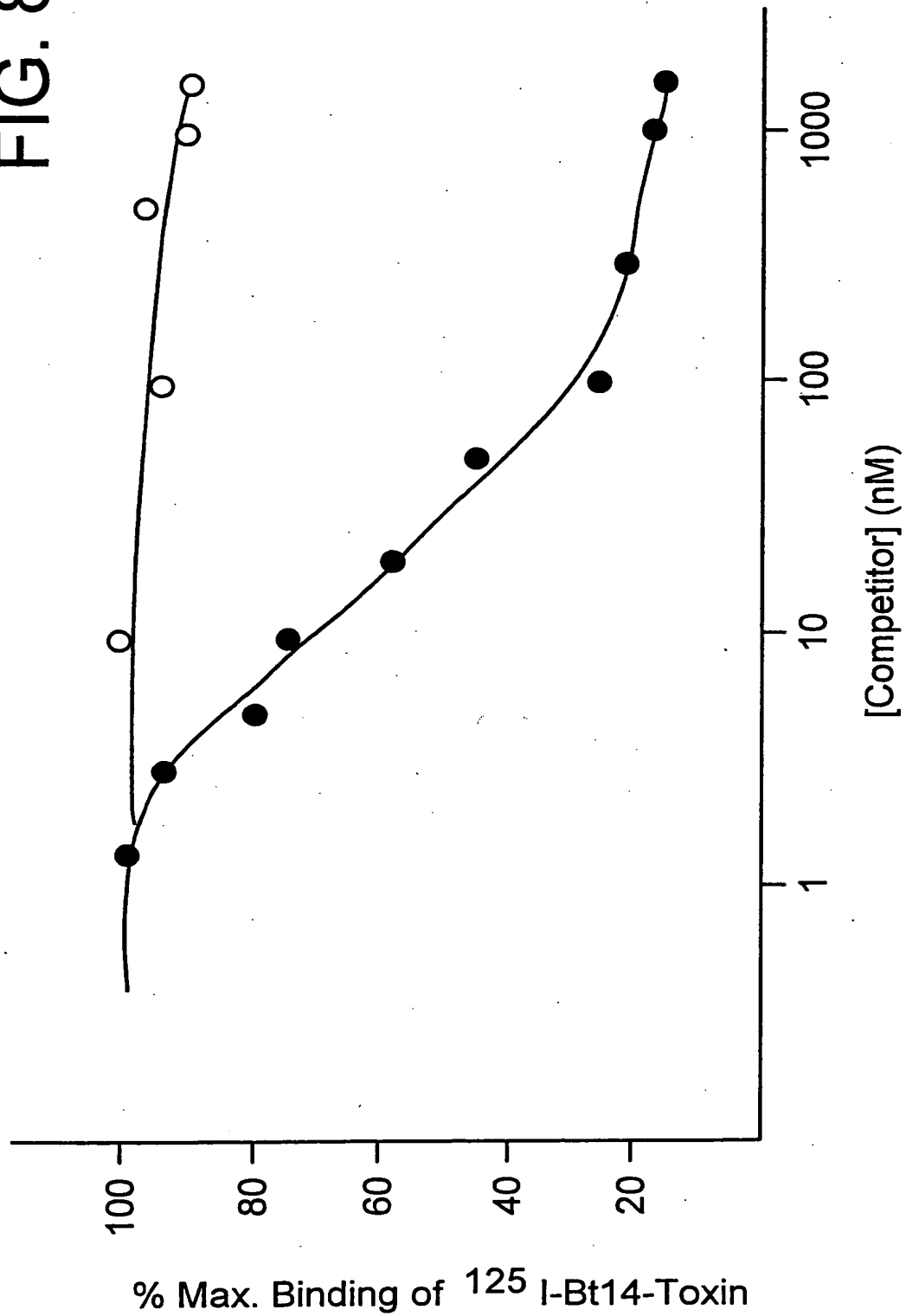


FIG. 9

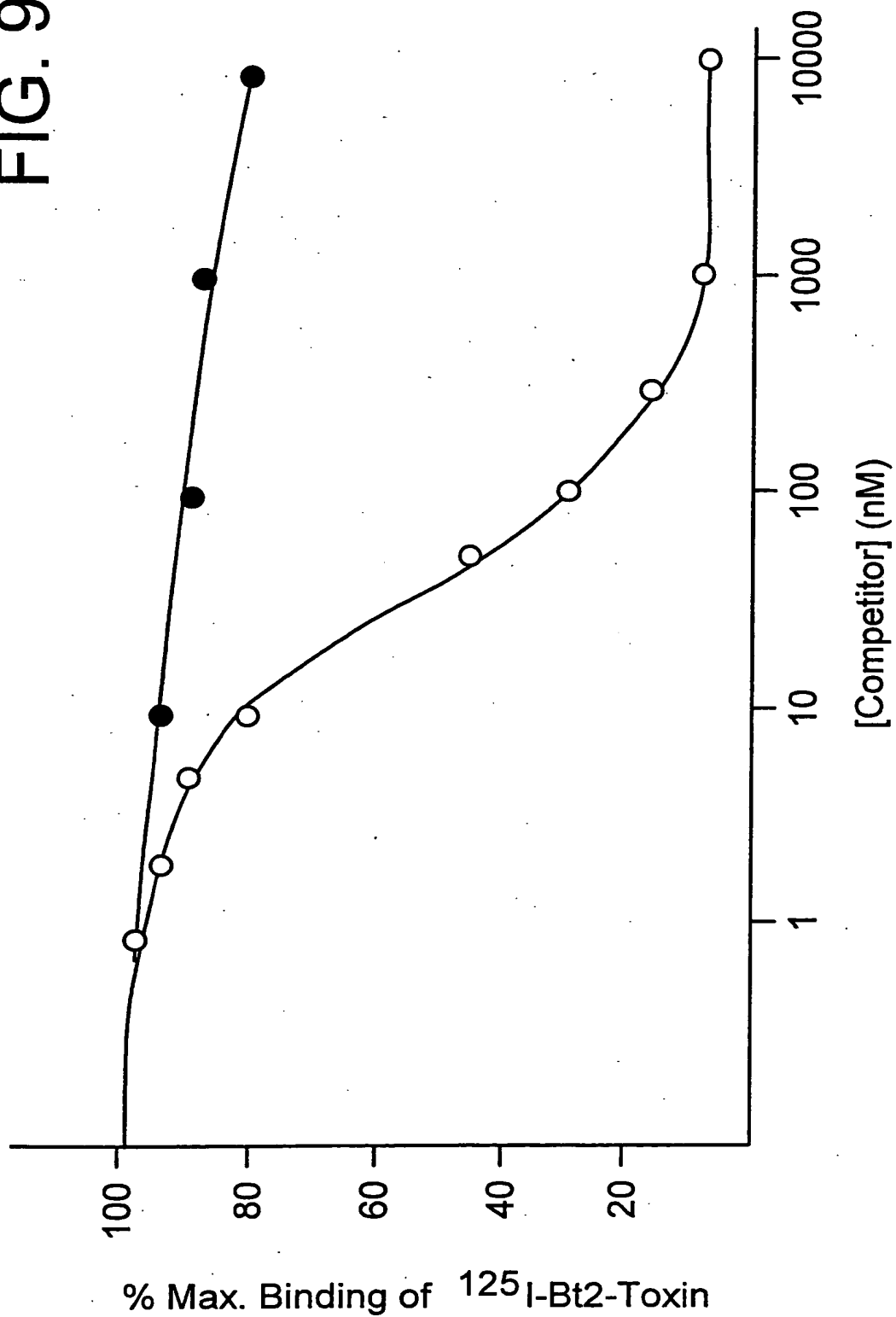


FIG. 10

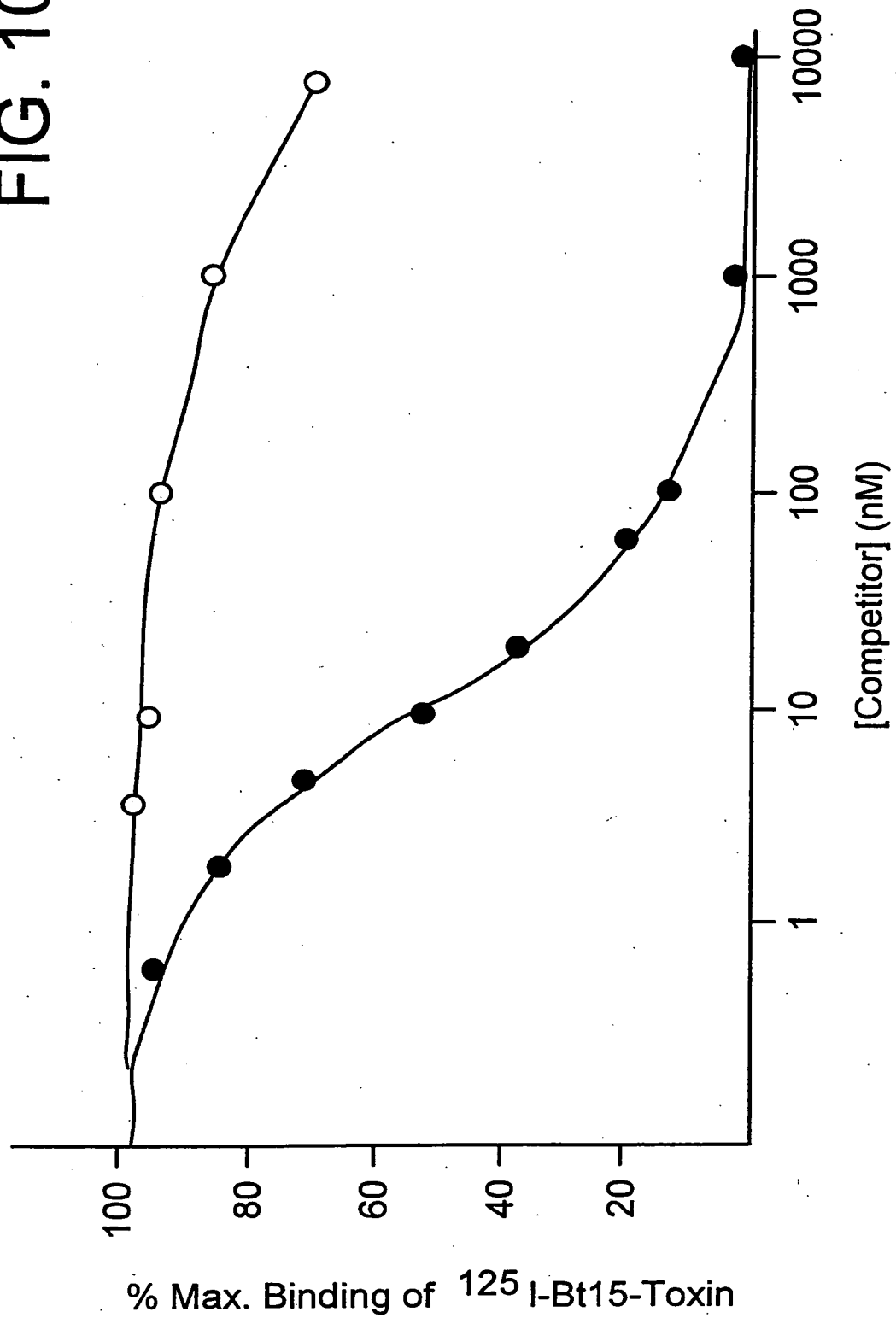


FIG. 11

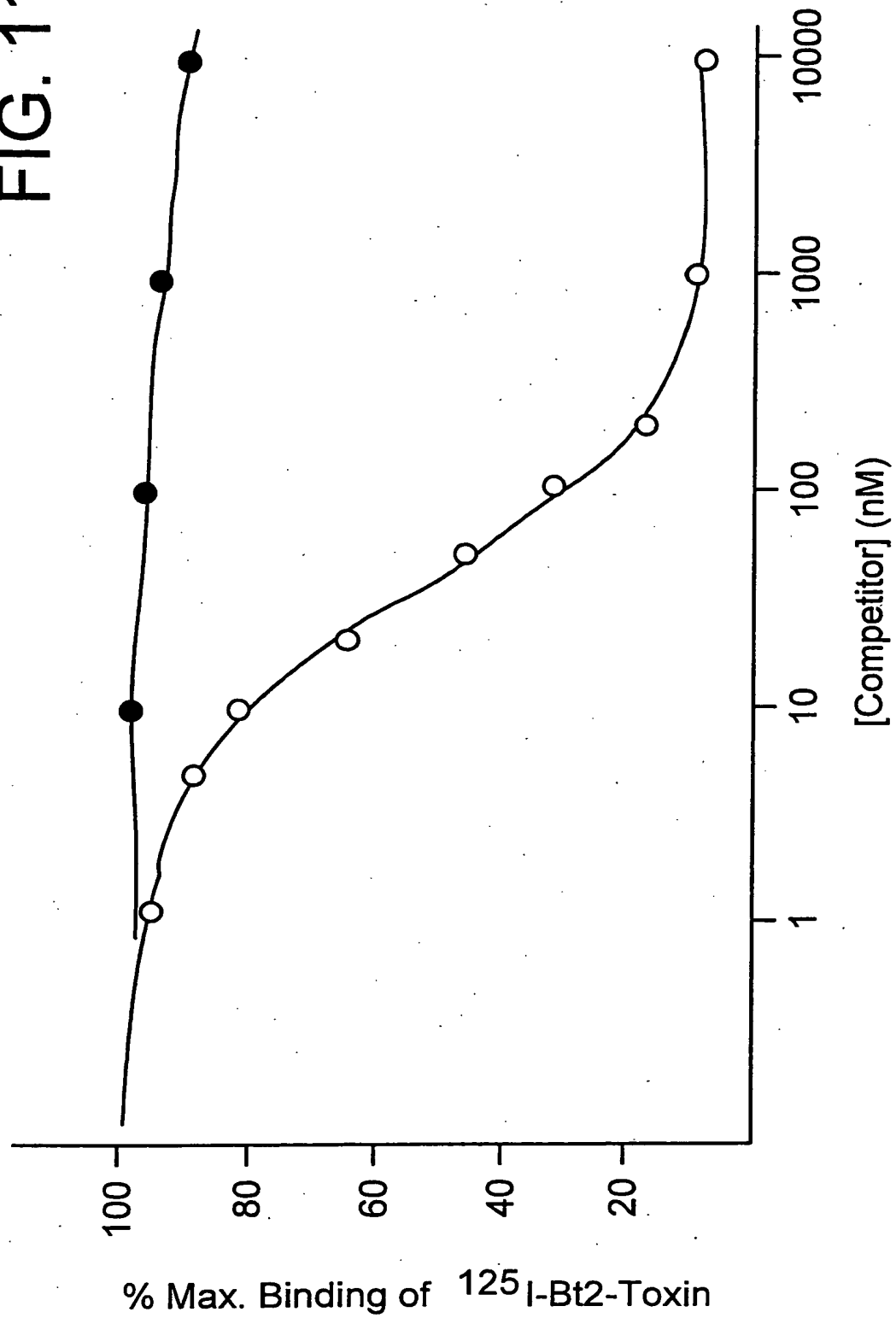


FIG. 12

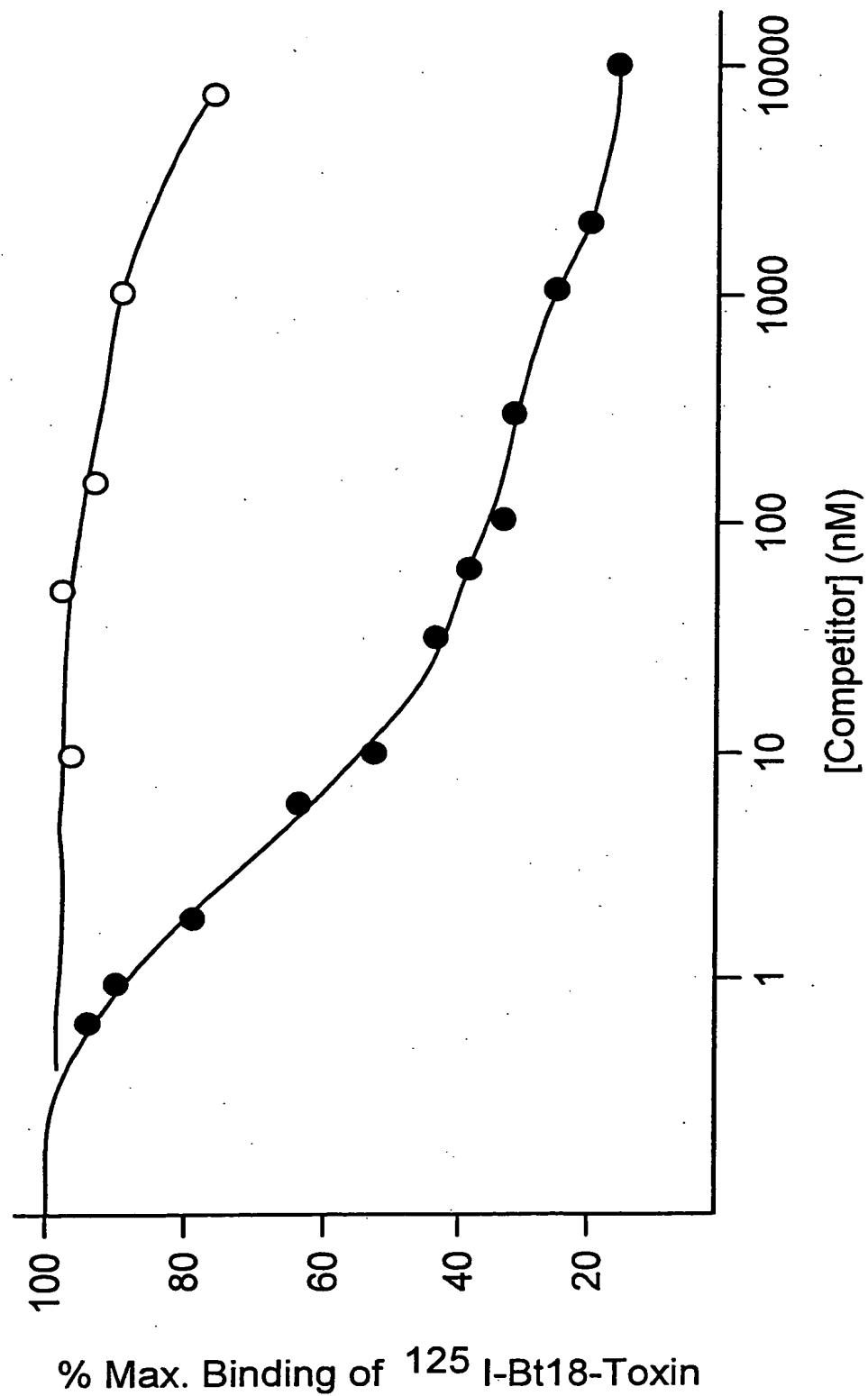


FIG. 13A

10	20	30	40	50
GGATCTGTTT TAATATAAGG GATTTGTGCC CTTCTCGTTA TATTCTTTTA				
60	70	80	90	100
TTAGCCCCAA AACTAGTGC AACTAAATAT TTTTATAATT ACACTGATTA				
110	120	130	140	150
AATACTTTAT TTTTGGGAGT AAGATTTATG CTGAAATGTA ATAAAATTCTG				
160	170	180	190	200
TTCCATTTTC TGTATTTTCT CATAAAATGT TTCATATGCT TTAAATTGTA				
210	220	230	240	250
GTAAAGAAAA ACAGTACAAA CTTAAAAGGA CTTTAGTAAT TTAATAAAAA				
260	269	278	287	
AAGGGGATAG TTT ATG GAA ATA AAT AAT CAA AAC CAA TGT				
MET Glu Ile Asn Asn Gln Asn Gln Cys				

FIG. 13B

296	305	314	323									
GTG	CCT	TAC	AAT	TGT	TTA	AGT	AAT	CCT	AAG	GAG	ATA	ATA
Val	Pro	Tyr	Asn	Cys	Leu	Ser	Asn	Pro	Lys	Glu	Ile	Ile
332	341	350	359	368								
TTA	GGC	GAG	GAA	AGG	CTA	GAA	ACA	GGG	AAT	ACT	GTA	GCA
Leu	Gly	Glu	Glu	Arg	Leu	Glu	Thr	Gly	Asn	Thr	Val	Ala
377	386	395	404									
GAC	ATT	TCA	TTA	GGG	CTT	ATT	AAT	TTT	CTA	TAT	TCT	AAT
Asp	Ile	Ser	Leu	Gly	Leu	Ile	Asn	Phe	Leu	Tyr	Ser	Asn
413	422	431	440									
TTT	GTA	CCA	GGA	GGA	GGA	TTT	ATA	GTA	GGT	TTA	CTA	GAA
Phe	Val	Pro	Gly	Gly	Gly	Phe	Ile	Val	Gly	Leu	Leu	Glu
449	458	467	476	485								
TTA	ATA	TGG	GGA	TTT	ATA	GGG	CCT	TCG	CAA	TGG	GAT	ATT
Leu	Ile	Trp	Gly	Phe	Ile	Gly	Pro	Ser	Gln	Trp	Asp	Ile
494	503	512	521									
TTT	TTA	GCT	CAA	ATT	GAG	CAA	TTG	ATT	AGT	CAA	AGA	ATA
Phe	Leu	Ala	Gln	Ile	Glu	Gln	Leu	Ile	Ser	Gln	Arg	Ile

FIG. 13C

530	539	548	557	
GAA GAA TTT GCT AGG AAT CAG GCA ATT TCA AGA TTG GAG				
Glu Glu Phe Ala Arg Asn Gln Ala Ile Ser Arg Leu Glu				
566	575	584	593	602
GGG CTA AGC AAT CTT TAT AAG GTC TAT GTT AGA GCG TTT				
Gly Leu Ser Asn Leu Tyr Lys Val Tyr Val Arg Ala Phe				
611	620	629	638	
AGC GAC TGG GAG AAA GAT CCT ACT AAT CCT GCT TTA AGG				
Ser Asp Trp Glu Lys Asp Pro Thr Asn Pro Ala Leu Arg				
647	656	665	674	
GAA GAA ATG CGT ATA CAA TTT AAT GAC ATG AAT AGT GCT				
Glu Glu MET Arg Ile Gln Phe Asn Asp MET Asn Ser Ala				
683	692	701	710	719
CTC ATA ACG GCT ATT CCA CTT TTT AGA GTT CAA AAT TAT				
Leu Ile Thr Ala Ile Pro Leu Phe Arg Val Gln Asn Tyr				
728	737	746	755	
GAA GTT GCT CTT TTA TCT GTA TAT GTT CAA GCC GCA AAC				
Glu Val Ala Leu Leu Ser Val Tyr Val Gln Ala Ala Asn				

FIG. 13D

764	773	782	791									
TTA	CAT	TTA	TCT	ATT	TTA	AGG	GAT	GTT	TCA	GTT	TTC	GGA
Leu	His	Leu	Ser	Ile	Leu	Arg	Asp	Val	Ser	Val	Phe	Gly
800	809	818	827	836								
GAA	AGA	TGG	GGA	TAT	GAT	ACA	GCG	ACT	ATC	AAT	AAT	CGC
Glu	Arg	Trp	Gly	Tyr	Asp	Thr	Ala	Thr	Ile	Asn	Asn	Arg
845	854	863	872									
TAT	AGT	GAT	CTG	ACT	AGC	CTT	ATT	CAT	GTT	TAT	ACT	AAC
Tyr	Ser	Asp	Leu	Thr	Ser	Leu	Ile	His	Val	Tyr	Thr	Asn
881	890	899	908									
CAT	TGT	GTG	GAT	ACG	TAT	AAT	CAG	GGA	TTA	AGG	CGT	TTG
His	Cys	Val	Asp	Thr	Tyr	Asn	Gln	Gly	Leu	Arg	Arg	Leu
917	926	935	944	953								
GAA	GGT	CGT	TTT	CTT	AGC	GAT	TGG	ATT	GTA	TAT	AAT	CGT
Glu	Gly	Arg	Phe	Leu	Ser	Asp	Trp	Ile	Val	Tyr	Asn	Arg
962	971	980	989									
TTC	CGG	AGA	CAA	TTG	ACA	ATT	TCA	GTA	TTA	GAT	ATT	GTT
Phe	Arg	Arg	Gln	Leu	Thr	Ile	Ser	Val	Leu	Asp	Ile	Val

FIG. 13E

998	1007	1016	1025									
GCG	TTT	TTT	CCA	AAT	TAT	GAT	ATT	AGA	ACA	TAT	CCA	ATT
Ala	Phe	Phe	Pro	Asn	Tyr	Asp	Ile	Arg	Thr	Tyr	Pro	Ile
1034		1043		1052		1061		1070				
CAA	ACA	GCT	ACT	CAG	CTA	ACG	AGG	GAA	GTC	TAT	CTG	GAT
Gln	Thr	Ala	Thr	Gln	Leu	Thr	Arg	Glu	Val	Tyr	Leu	Asp
	1079		1088		1097		1106					
TTA	CCT	TTT	ATT	AAT	CAA	AAT	CTT	TCT	CCT	GCA	GCA	AGC
Leu	Pro	Phe	Ile	Asn	Glu	Asn	Leu	Ser	Pro	Ala	Ala	Ser
	1115		1124		1133		1142					
TAT	CCA	ACC	TTT	TCA	GCT	GCT	GAA	AGT	GCT	ATA	ATT	AGA
Tyr	Pro	Thr	Phe	Ser	Ala	Ala	Glu	Ser	Ala	Ile	Ile	Arg
1151		1160		1169		1178		1187				
AGT	CCT	CAT	TTA	GTA	GAC	TTT	TTA	AAT	AGC	TTT	ACC	ATT
Ser	Pro	His	Leu	Val	Asp	Phe	Leu	Asn	Ser	Phe	Thr	Ile
	1196		1205		1214		1223					
TAT	ACA	GAT	AGT	CTG	GCA	CGT	TAT	GCA	TAT	TGG	GGA	GGG
Tyr	Thr	Asp	Ser	Leu	Ala	Arg	Tyr	Ala	Tyr	Trp	Gly	Gly

FIG. 13F

1232	1241	1250	1259	
CAC	TTG	GTA	AAT	TCT
His	Leu	Val	Asn	Ser
				Phe
				Arg
				Thr
				Gly
				Thr
				Thr
				Thr
				Asn

1268	1277	1286	1295	1304
TTG	ATA	AGA	TCC	CCT
Leu	Ile	Arg	Ser	Pro
				Leu
				Tyr
				Gly
				Arg
				Glu
				Gly
				Asn
				Thr

1313	1322	1331	1340	
GAG	CGC	CCC	GTA	ACT
Glu	Arg	Pro	Val	Thr
				Ile
				Thr
				Ala
				Ser
				Pro
				Ser
				Val
				Pro

1349	1358	1367	1376	
ATA	TTT	AGA	ACA	CTT
Ile	Phe	Arg	Thr	Leu
				Ser
				Tyr
				Ile
				Thr
				Gly
				Leu
				Asp
				Asn

1385	1394	1403	1412	1421
TCA	AAT	CCT	GTA	GCT
Ser	Asn	Pro	Val	Ala
				Gly
				Ile
				Glu
				Gly
				Val
				Glu
				Phe
				Gln

1430	1439	1448	1457	
AAT	ACT	ATA	AGT	AGA
Asn	Thr	Ile	Ser	Arg
				Ser
				Ile
				Tyr
				Arg
				Lys
				Ser
				Gly
				Pro

FIG. 13G

1466	1475	1484	1493	
ATA	GAT	TCT	TTT	AGT
Ile	Asp	Ser	Phe	Ser
				Glu
				Leu
				Pro
				Pro
				Gln
				Asp
				Ala
				Ser
1502	1511	1520	1529	1538
GTA	TCT	CCT	GCA	ATT
Val	Ser	Pro	Ala	Ile
				Gly
				Tyr
				Ser
				His
				Arg
				Leu
				Cys
				His
	1547	1556	1565	1574
GCA	ACA	TTT	TTA	GAA
Ala	Thr	Phe	Leu	Glu
				Arg
				Ile
				Ser
				Gly
				Pro
				Arg
				Ile
				Ala
1583	1592	1601	1610	
GGC	ACC	GTA	TTT	TCT
Gly	Thr	Val	Phe	Ser
				Trp
				Thr
				His
				Arg
				Ser
				Ala
				Ser
				Pro
1619	1628	1637	1646	1655
ACT	AAT	GAA	GTA	AGT
Thr	Asn	Glu	Val	Ser
				Pro
				Ser
				Arg
				Ile
				Thr
				Gln
				Ile
				Pro
	1664	1673	1682	1691
TGG	GTA	AAG	GCG	CAT
Trp	Val	Lys	Ala	His
				Thr
				Leu
				Ala
				Ser
				Gly
				Ala
				Ser
				Val

FIG. 13H

1700	1709	1718	1727	
ATT AAA GGT CCT GGA TTT ACA GGT GGA GAT ATT CTG ACT				
Ile Lys Gly Pro Gly Phe Thr Gly Gly Asp Ile Leu Thr				
1736	1745	1754	1763	1772
AGG AAT AGT ATG GGC GAG CTG GGG ACC TTA CGA GTA ACC				
Arg Asn Ser MET Gly Glu Leu Gly Thr Leu Arg Val Thr				
1781	1790	1799	1808	
TTC ACA GGA AGA TTA CCA CAA AGT TAT TAT ATA CGT TTC				
Phe Thr Gly Arg Leu Pro Gln Ser Tyr Tyr Ile Arg Phe				
1817	1826	1835	1844	
CGT TAT GCT TCG GTA GCA AAT AGG AGT GGT ACA TTT AGA				
Arg Tyr Ala Ser Val Ala Asn Arg Ser Gly Thr Phe Arg				
1853	1862	1871	1880	1889
TAT TCA CAG CCA CCT TCG TAT GGA ATT TCA TTT CCA AAA				
Tyr Ser Gln Pro Pro Ser Tyr Gly Ile Ser Phe Pro Lys				
1898	1907	1916	1925	
ACT ATG GAC GCA GGT GAA CCA CTA ACA TCT CGT TCG TTC				
Thr MET Asp Ala Gly Glu Pro Leu Thr Ser Arg Ser Phe				

FIG. 13I

1934	1943	1952	1961	
GCT	CAT	ACA	ACA	CTC
Ala	His	Thr	Thr	Leu
TTC	ACT	CCA	ATA	ACC
Phe	Thr	Pro	Ile	Thr
TTT	TCA	CGA		
Ser	Arg			
1970	1979	1988	1997	2006
GCT	CAA	GAA	GAA	TTT
Ala	Gln	Glu	Glu	Phe
GAT	CTA	TAC	ATC	CAA
Asp	Leu	Tyr	Ile	Gln
TCG	GGT	GTT		
Ser	Gly	Val		

2015	2024	2033	2042	
TAT	ATA	GAT	CGA	ATT
Tyr	Ile	Asp	Arg	Ile
GAA	TTT	ATA	CCG	GTT
Glu	Phe	Ile	Pro	Val
ACT	GCA	ACA		
Thr	Ala	Thr		
----->				
2051	2060	2069	2078	
TTT	GAG	GCA	GAA	TAT
Phe	Glu	Ala	Glu	Tyr
GAT	TTA	GAA	AGA	GCG
Asp	Leu	Glu	Arg	Ala
CAA	AAG	GTG		
Gln	Lys	Val		
2087	2096	2105	2114	2123
GTG	AAT	GCC	CTG	TTT
Val	Asn	Ala	Leu	Phe
ACG	TCT	ACA	AAC	CAA
Thr	Ser	Thr	Asn	Gln
CTA	GGG	CTA		
Leu	Gly	Leu		
2132	2141	2150	2159	
AAA	ACA	GAT	GTG	ACG
Lys	Thr	Asp	Val	Thr
GAT	TAT	CAT	ATT	GAT
Asp	Tyr	His	Ile	Asp
CAG	GTA	TCC		
Gln	Val	Ser		

FIG. 13J

2168	2177	2186	2195									
AAT	CTA	GTT	GCG	TGT	TTA	TCG	GAT	GAA	TTT	TGT	CTG	GAT
Asn	Leu	Val	Ala	Cys	Leu	Ser	Asp	Glu	Phe	Cys	Leu	Asp
2204	2213	2222	2231	2240								
GAA	AAG	AGA	GAA	TTG	TCC	GAG	AAA	GTT	AAA	CAT	GCA	AAG
Glu	Lys	Arg	Glu	Leu	Ser	Glu	Lys	Val	Lys	His	Ala	Lys
2249	2258	2267	2276									
CGA	CTC	AGT	GAT	GAG	CGG	AAT	TTA	CTT	CAA	GAT	CCA	AAC
Arg	Leu	Ser	Asp	Glu	Arg	Asn	Leu	Leu	Gln	Asp	Pro	Asn
2285	2294	2303	2312									
TTC	AGA	GGG	ATC	AAT	AGG	CAA	CCA	GAC	CGT	GGC	TGG	AGA
Phe	Arg	Gly	Ile	Asn	Arg	Gln	Pro	Asp	Arg	Gly	Trp	Arg
2321	2330	2339	2348	2357								
GGA	AGT	ACG	GAT	ATT	ACT	ATC	CAA	GGA	GGA	GAT	GAC	GTA
Gly	Ser	Thr	Asp	Ile	Thr	Ile	Gln	Gly	Gly	Asp	Asp	Val
2366	2375	2384	2393									
TTC	AAA	GAG	AAT	TAC	GTT	ACG	CTA	CCG	GGT	ACC	TTT	GAT
Phe	Lys	Glu	Asn	Tyr	Val	Thr	Leu	Pro	Gly	Thr	Phe	Asp

FIG. 13K

2402	2411	2420	2429									
GAG	TGC	TAT	CCA	ACG	TAT	TTA	TAT	CAA	AAA	ATA	GAT	GAG
Glu	Cys	Tyr	Pro	Thr	Tyr	Leu	Tyr	Gln	Lys	Ile	Asp	Glu
2438	2447	2456	2465	2474								
TCG	AAA	TTA	AAA	GCC	TAT	ACC	CGT	TAT	CAA	TTA	AGA	GGG
Ser	Lys	Leu	Lys	Ala	Tyr	Thr	Arg	Tyr	Gln	Leu	Arg	Gly
2483	2492	2501	2510									
TAT	ATC	GAA	GAT	AGT	CAA	GAC	TTA	GAA	ATC	TAT	TTA	ATT
Tyr	Ile	Glu	Asp	Ser	Gln	Asp	Leu	Glu	Ile	Tyr	Leu	Ile
2519	2528	2537	2546									
CGT	TAC	AAT	GCA	AAA	CAC	GAA	ATA	GTA	AAT	GTA	CCA	GGT
Arg	Tyr	Asn	Ala	Lys	His	Glu	Ile	Val	Asn	Val	Pro	Gly
2555	2564	2573	2582	2591								
ACA	GGA	AGT	TTA	TGG	CCT	CTT	TCT	GTA	GAA	AAT	CAA	ATT
Thr	Gly	Ser	Leu	Trp	Pro	Leu	Ser	Val	Glu	Asn	Gln	Ile
2600	2609	2618	2627									
GGA	CCT	TGT	GGA	GAA	CCG	AAT	CGA	TGC	GCG	CCA	CAC	CTT
Gly	Pro	Cys	Gly	Glu	Pro	Asn	Arg	Cys	Ala	Pro	His	Leu

FIG. 13L

2636	2645	2654	2663									
GAA	TGG	AAT	CCT	GAT	TTA	CAC	TGT	TCC	TGC	AGA	GAC	GGG
Glu	Trp	Asn	Pro	Asp	Leu	His	Cys	Ser	Cys	Arg	Asp	Gly
2672	2681	2690	2699	2708								
GAA	AAA	TGT	GCA	CAT	CAT	TCT	CAT	CAT	TTC	TCT	TTG	GAC
Glu	Lys	Cys	Ala	His	His	Ser	His	His	Phe	Ser	Leu	Asp
2717	2726	2735	2744									
ATT	GAT	GTT	GGA	TGT	ACA	GAC	TTA	AAT	GAG	GAC	TTA	GGT
Ile	Asp	Val	Gly	Cys	Thr	Asp	Leu	Asn	Glu	Asp	Leu	Gly
2753	2762	2771	2780									
GTA	TGG	GTG	ATA	TTC	AAG	ATT	AAG	ACG	CAA	GAT	GGC	CAC
Val	Trp	Val	Ile	Phe	Lys	Ile	Lys	Thr	Gln	Asp	Gly	His
2789	2798	2807	2816	2825								
GCA	CGA	CTA	GGG	AAT	CTA	GAG	TTT	CTC	GAA	GAG	AAA	CCA
Ala	Arg	Leu	Gly	Asn	Leu	Glu	Phe	Leu	Glu	Glu	Lys	Pro
2834	2843	2852	2861									
TTA	TTA	GGA	GAA	GCA	CTA	GCT	CGT	GTG	AAA	AGA	GCG	GAG
Leu	Leu	Gly	Glu	Ala	Leu	Ala	Arg	Val	Lys	Arg	Ala	Glu

FIG. 13M

2870	2879	2888	2897									
AAA	AAA	TGG	AGA	GAC	AAA	CGC	GAA	ACA	TTA	CAA	TTG	GAA
Lys	Lys	Trp	Arg	Asp	Lys	Arg	Glu	Thr	Leu	Gln	Leu	Glu
2906	2915	2924	2933	2942								
ACA	ACT	ATC	GTT	TAT	AAA	GAG	GCA	AAA	GAA	TCT	GTA	GAT
Thr	Thr	Ile	Val	Tyr	Lys	Glu	Ala	Lys	Glu	Ser	Val	Asp
2951	2960	2969	2978									
GCT	TTA	TTT	GTA	AAC	TCT	CAA	TAT	GAT	AGA	TTA	CAA	GCG
Ala	Leu	Phe	Val	Asn	Ser	Gln	Tyr	Asp	Arg	Leu	Gln	Ala
2987	2996	3005	3014									
GAT	ACG	AAC	ATC	GCG	ATG	ATT	CAT	GCG	GCA	GAT	AAA	CGC
Asp	Thr	Ash	Ile	Ala	MET	Ile	His	Ala	Ala	Asp	Lys	Arg
3023	3032	3041	3050	3059								
GTT	CAT	AGA	ATT	CGA	GAA	GCG	TAT	CTG	CCG	GAG	CTG	TCT
Val	His	Arg	Ile	Arg	Glu	Ala	Tyr	Leu	Pro	Glu	Leu	Ser
3068	3077	3086	3095									
GTG	ATT	CCG	GGT	GTC	AAT	GCG	GCT	ATT	TTT	GAA	GAA	TTA
Val	Ile	Pro	Gly	Val	Asn	Ala	Ala	Ile	Phe	Glu	Glu	Leu

FIG. 13N

3104	3113	3122	3131	
GAA GAG CGT ATT TTC ACT GCA TTT TCC CTA TAT GAT GCG				
Glu Glu Arg Ile Phe Thr Ala Phe Ser Leu Tyr Asp Ala				
3140	3149	3158	3167	3176
AGA AAT ATT ATT AAA AAT GGC GAT TTC AAT AAT GGC TTA				
Arg Asn Ile Ile Lys Asn Gly Asp Phe Asn Asn Gly Leu				
3185	3194	3203	3212	
TTA TGC TGG AAC GTG AAA GGG CAT GTA GAG GTA GAA GAA				
Leu Cys Trp Asn Val Lys Gly His Val Glu Val Glu Glu				
3221	3230	3239	3248	
CAA AAC AAT CAC CGT TCA GTC CTG GTT ATC CCA GAA TGG				
Gln Asn Asn His Arg Ser Val Leu Val Ile Pro Glu Trp				
3257	3266	3275	3284	3293
GAG GCA GAA GTG TCA CAA GAG GTT CGT GTC TGT CCA GGT				
Glu Ala Glu Val Ser Gln Glu Val Arg Val Cys Pro Gly				
3302	3311	3320	3329	
CGT GGC TAT ATC CTT CGT GTT ACA GCG TAC AAA GAG GGA				
Arg Gly Tyr Ile Leu Arg Val Thr Ala Tyr Lys Glu Gly				

FIG. 13P

3338	3347	3356	3365									
TAT	GGA	GAA	GGT	TGC	GTA	ACG	ATC	CAT	GAG	ATC	GAG	AAC
Tyr	Gly	Glu	Gly	Cys	Val	Thr	Ile	His	Glu	Ile	Glu	Asn
3374	3383	3392	3401	3410								
AAT	ACA	GAC	GAA	CTG	AAA	TTC	AAC	AAC	TGT	GTA	GAA	GAG
Asn	Thr	Asp	Glu	Leu	Lys	Phe	Asn	Asn	Cys	Val	Glu	Glu
3419	3428	3437	3446									
GAA	GTA	TAT	CCA	AAC	AAC	ACG	GTA	ACG	TGT	ATT	AAT	TAT
Glu	Val	Tyr	Pro	Asn	Asn	Thr	Val	Thr	Cys	Ile	Asn	Tyr
3455	3464	3473	3482									
ACT	GCG	ACT	CAA	GAA	GAA	TAT	GAG	GGT	ACG	TAC	ACT	TCT
Thr	Ala	Thr	Gln	Glu	Glu	Tyr	Glu	Gly	Thr	Tyr	Thr	Ser
3491	3500	3509	3518	3527								
CGT	AAT	CGA	GGA	TAT	GAC	GAA	GCC	TAT	GGT	AAT	AAC	CCT
Arg	Asn	Arg	Gly	Tyr	Asp	Glu	Ala	Tyr	Gly	Asn	Asn	Pro
3536	3545	3554	3563									
TCC	GTA	CCA	GCT	GAT	TAT	GCG	TCA	GTC	TAT	GAA	GAA	AAA
Ser	Val	Pro	Ala	Asp	Tyr	Ala	Ser	Val	Tyr	Glu	Glu	Lys

FIG. 13Q

3572	3581	3590	3599									
TCG	TAT	ACA	GAT	AGA	CGA	AGA	GAG	AAT	CCT	TGT	GAA	TCT
Ser	Tyr	Thr	Asp	Arg	Arg	Arg	Glu	Asn	Pro	Cys	Glu	Ser
3608	3617	3626	3635	3644								
AAC	AGA	GGA	TAT	GGA	GAT	TAC	ACA	CCA	CTA	CCA	GCT	GGT
Asn	Arg	Gly	Tyr	Gly	Asp	Tyr	Thr	Pro	Leu	Pro	Ala	Gly
3653	3662	3671	3680									
TAT	GTA	ACA	AAG	GAA	TTA	GAG	TAC	TTC	CCA	GAG	ACC	GAT
Tyr	Val	Thr	Lys	Glu	Leu	Glu	Tyr	Phe	Pro	Glu	Thr	Asp
3689	3698	3707	3716									
AAG	GTA	TGG	ATT	GAG	ATT	GGA	GAA	ACA	GAA	GGA	ACA	TTC
Lys	Val	Trp	Ile	Glu	Ile	Gly	Glu	Thr	Glu	Gly	Thr	Phe
3725	3734	3743	3752	3761								
ATC	GTG	GAC	AGC	GTG	GAA	TTA	CTC	CTT	ATG	GAG	GAA	TAG
Ile	Val	Asp	Ser	Val	Glu	Leu	Leu	Leu	MET	Glu	Glu	•

FIG. 13R

3771 3781 3791 3801 3811
GACCATCCGAGTATAGCAGT TTAATAAATA TTAATTAAAA TAGTAGTCTA

3821 3831 3841 3851 3861
ACTTCCGTTC CAATTAAATA AGTAAATTAC AGTTGTAAAA AAAAACGAAC

3871 3881 3891 3901
ATTACTCTTC AAAGAGCGAT GTCCGTTTTT TATATGGTGT GT

FIG. 14A

10	20	30	40	50
AATAGAATCT CAAATCTCGA TGA CTGCTTA GTCTTTTAA TACTGTCTAC				
60	70	80	90	100
TTGACAGGGGTAGGAACATA ATCGGTCAAT TTAAATATG GGGCATATAT				
110	120	130	140	150
TGATATTTTA TAAATTTGT TACGTTTTT GTATTTTTC ATAAGATGTG				
160	170	180	190	200
TCATATGTAT TAAATCGTGG TAATGAAAA CAGTATCAAA CTATCAGAAC				
210	220	230	239	
TTTGGTAGTT TAATAAAAA ACGGAGGTAT TTT ATG GAG GAA				
		-----	MET	Glu Glu
248	257	266	275	
AAT AAT CAA AAT CAA TGC ATA CCT TAC AAT TGT TTA AGT				
Asn Asn Gln Asn Gln Cys Ile Pro Tyr Asn Cys Leu Ser				
284	293	302	311	320
AAT CCT GAA GAA GTA CTT TTG GAT GGA GAA CGG ATA TCA				
Asn Pro Glu Glu Val Leu Leu Asp Gly Glu Arg Ile Ser				

FIG. 14B

329	338	347	356									
ACT	GGT	AAT	TCA	TCA	ATT	GAT	ATT	TCT	CTG	TCA	CTT	GTT
Thr	Gly	Asn	Ser	Ser	Ile	Asp	Ile	Ser	Leu	Ser	Leu	Val
365	374	383	392									
CAG	TTT	ATG	GTA	TCT	AAC	TTT	GTA	CCA	GGG	GGA	GGA	TTT
Gln	Phe	Leu	Val	Ser	Asn	Phe	Val	Pro	Gly	Gly	Gly	Phe
401	410	419	428	437								
TTA	GTT	GGA	TTA	ATA	GAT	TTT	GTA	TGG	GGA	ATA	GTT	GGC
Leu	Val	Gly	Leu	Ile	Asp	Phe	Val	Trp	Gly	Ile	Val	Gly
446	455	464	473									
CCT	TCT	CAA	TGG	GAT	GCA	TTT	CTA	GTA	CAA	ATT	GAA	CAA
Pro	Ser	Gln	Trp	Asp	Ala	Phe	Leu	Val	Gln	Ile	Glu	Gln
482	491	500	509									
TTA	ATT	AAT	GAA	AGA	ATA	GCT	GAA	TTT	GCT	AGG	AAT	GCT
Leu	Ile	Asn	Glu	Arg	Ile	Ala	Glu	Phe	Ala	Arg	Asn	Ala
518	527	536	545	554								
GCT	ATT	GCT	AAT	TTA	GAA	GGA	TTA	GGA	AAC	AAT	TTA	AAT
Ala	Ile	Ala	Asn	Leu	Glu	Gly	Leu	Gly	Asn	Asn	Phe	Asn

FIG. 14C

563	572	581	590									
ATA	TAT	GTG	GAA	GCA	TTT	AAA	GAA	TGG	GAA	GAA	GAT	CCT
Ile	Tyr	Val	Glu	Ala	Phe	Lys	Glu	Trp	Glu	Glu	Asp	Pro
599	608	617	626									
AAT	AAT	CCA	GAA	ACC	AGG	ACC	AGA	GTA	ATT	GAT	CGC	TTT
Asn	Asn	Pro	Glu	Thr	Arg	Thr	Arg	Val	Ile	Asp	Arg	Phe
635	644	653	662	671								
CGT	ATA	CTT	GAT	GGG	CTA	CTT	GAA	AGG	GAC	ATT	CCT	TCG
Arg	Ile	Leu	Asp	Gly	Leu	Leu	Glu	Arg	Asp	Ile	Pro	Ser
680	689	698	707									
TTT	CGA	ATT	TCT	GGA	TTT	GAA	GTA	CCC	CTT	TTA	TCC	GTT
Phe	Arg	Ile	Ser	Gly	Phe	Glu	Val	Pro	Leu	Leu	Ser	Val
716	725	734	743									
TAT	GCT	CAA	GCG	GCC	AAT	CTG	CAT	CTA	GCT	ATA	TTA	AGA
Tyr	Ala	Gln	Ala	Ala	Asn	Leu	His	Leu	Ala	Ile	Leu	Arg
752	761	770	779	788								
GAT	TCT	GTA	ATT	TTT	GGA	GAA	AGA	TGG	GGA	TTG	ACA	ACG
Asp	Ser	Val	Ile	Phe	Gly	Glu	Arg	Trp	Gly	Leu	Thr	Thr

FIG. 14D

	797		806		815		824					
ATA	AAT	GTC	AAT	GAA	AAC	TAT	AAT	AGA	CTA	ATT	AGG	CAT
Ile	Asn	Val	Asn	Glu	Asn	Tyr	Asn	Arg	Leu	Ile	Arg	His
	833		842		851		860					
ATT	GAT	GAA	TAT	GCT	GAT	CAC	TGT	GCA	AAT	ACG	TAT	AAT
Ile	Asp	Glu	Tyr	Ala	Asp	His	Cys	Ala	Asn	Thr	Tyr	Asn
	869		878		887		896		905			
CGG	GGA	TTA	AAT	AAT	TTA	CCG	AAA	TCT	ACG	TAT	CAA	GAT
Arg	Gly	Leu	Asn	Asn	Leu	Pro	Lys	Ser	Thr	Tyr	Gln	Asp
	914		923		932		941					
TGG	ATA	ACA	TAT	AAT	CGA	TTA	CGG	AGA	GAC	TTA	ACA	TTG
Trp	Ile	Thr	Tyr	Asn	Arg	Leu	Arg	Arg	Asp	Leu	Thr	Leu
	950		959		968		977					
ACT	GTA	TTA	GAT	ATC	GCC	GCT	TTC	TTT	CCA	AAC	TAT	GAC
Thr	Val	Leu	Asp	Ile	Ala	Ala	Phe	Phe	Pro	Asn	Tyr	Asp
	986		995		1004		1013		1022			
AAT	AGG	AGA	TAT	CCA	ATT	CAG	CCA	GTT	GGT	CAA	CTA	ACA
Asn	Arg	Arg	Tyr	Pro	Ile	Gln	Pro	Val	Gly	Gln	Leu	Thr

FIG. 14E

1031	1040	1049	1058									
AGG	GAA	GTT	TAT	ACG	GAC	CCA	TTA	ATT	AAT	TTT	AAT	CCA
Arg	Glu	Val	Tyr	Thr	Asp	Pro	Leu	Ile	Asn	Phe	Asn	Pro
1067	1076	1085	1094									
CAG	TTA	CAG	TCT	GTA	GCT	CAA	TTA	CCT	ACT	TTT	AAC	GTT
Gln	Leu	Gln	Ser	Val	Ala	Gln	Leu	Pro	Thr	Phe	Asn	Val
1103	1112	1121	1130	1139								
ATG	GAG	AGC	AGC	GCA	ATT	AGA	AAT	CCT	CAT	TTA	TTT	GAT
MET	Glu	Ser	Ser	Ala	Ile	Arg	Asn	Pro	His	Leu	Phe	Asp
1148	1157	1166	1175									
ATA	TTG	AAT	AAT	CTT	ACA	ATC	TTT	ACG	GAT	TGG	TTT	AGT
Ile	Leu	Asn	Asn	Leu	Thr	Ile	Phe	Thr	Asp	Trp	Phe	Ser
1184	1193	1202	1211									
GTT	GGA	CGC	AAT	TTT	TAT	TGG	GGA	GGA	CAT	CGA	GTA	ATA
Val	Gly	Arg	Asn	Phe	Tyr	Trp	Gly	Gly	His	Arg	Val	Ile
1220	1229	1238	1247	1256								
TCT	AGC	CTT	ATA	GGA	GGT	GGT	AAC	ATA	ACA	TCT	CCT	ATA
Ser	Ser	Leu	Ile	Gly	Gly	Gly	Asn	Ile	Thr	Ser	Pro	Ile

FIG. 14F

1265	1274	1283	1292									
TAT	GGA	AGA	GAG	GCG	AAC	CAG	GAG	CCT	CCA	AGA	TCC	TTT
Tyr	Gly	Arg	Glu	Ala	Asn	Gln	Glu	Pro	Pro	Arg	Ser	Phe
1301	1310	1319	1328									
ACT	TTT	AAT	GGA	CCG	GTA	TTT	AGG	ACT	TTA	TCA	AAT	CCT
Thr	Phe	Asn	Gly	Pro	Val	Phe	Arg	Thr	Leu	Ser	Asn	Pro
1337	1346	1355	1364	1373								
ACT	TTA	CGA	TTA	TTA	CAG	CAA	CCT	TGG	CCA	GCG	CCA	CCA
Thr	Leu	Arg	Leu	Leu	Gln	Gln	Pro	Trp	Pro	Ala	Pro	Pro
1382	1391	1400	1409									
TTT	AAT	TTA	CGT	GGT	GTT	GAA	GGA	GTA	GAA	TTT	TCT	ACA
Phe	Ash	Leu	Arg	Gly	Val	Glu	Gly	Val	Glu	Phe	Ser	Thr
1418	1427	1436	1445									
CCT	ACA	AAT	AGC	TTT	ACG	TAT	CGA	GGA	AGA	GGT	ACG	GTT
Pro	Thr	Asn	Ser	Phe	Thr	Tyr	Arg	Gly	Arg	Gly	Thr	Val
1454	1463	1472	1481	1490								
GAT	TCT	TTA	ACT	GAA	TTA	CCG	CCT	GAG	GAT	AAT	AGT	GTG
Asp	Ser	Leu	Thr	Glu	Leu	Pro	Pro	Glu	Asp	Asn	Ser	Val

FIG. 14G

1499	1508	1517	1526	
CCA CCT CGC GAA GGA TAT AGT CAT CGT TTA TGT CAT GCA				
Pro Pro Arg Glu Gly Tyr Ser His Arg Leu Cys His Ala				
1535	1544	1553	1562	
ACT TTT GTT CAA AGA TCT GGA ACA CCT TTT TTA ACA ACT				
Thr Phe Val Gln Arg Ser Gly Thr Pro Phe Leu Thr Thr				
1571	1580	1589	1598	1607
GGT GTA GTA TTT TCT TGG ACG CAT CGT AGT GCA ACT CTT				
Gly Val Val Phe Ser Trp Thr His Arg Ser Ala Thr Leu				
1616	1625	1634	1643	
ACA AAT ACA ATT GAT CCA GAG AGA ATT AAT CAA ATA CCT				
Thr Asn Thr Ile Asp Pro Glu Arg Ile Asn Gln Ile Pro				
1652	1661	1670	1679	
TTA GTG AAA GGA TTT AGA GTT TGG GGG GGC ACC TCT GTC				
Leu Val Lys Gly Phe Arg Val Trp Gly Gly Thr Ser Val				
1688	1697	1706	1715	1724
ATT ACA GGA CCA GGA TTT ACA GGA GGG GAT ATC CTT CGA				
Ile Thr Gly Pro Gly Phe Thr Gly Gly Asp Ile Leu Arg				

FIG. 14H

1733	1742	1751	1760	
AGA AAT ACC TTT GGT GAT TTT GTA TCT CTA CAA GTC AAT				
Arg Asn Thr Phe Gly Asp Phe Val Ser Leu Gln Val Asn				
1769	1778	1787	1796	
ATT AAT TCA CCA ATT ACC CAA AGA TAC CGT TTA AGA TTT				
Ile Asn Ser Pro Ile Thr Gln Arg Tyr Arg Leu Arg Phe				
1805	1814	1823	1832	1841
CGT TAC GCT TCC AGT AGG GAT GCA CGA GTT ATA GTA TTA				
Arg Tyr Ala Ser Ser Arg Asp Ala Arg Val Ile Val Leu				
1850	1859	1868	1877	
ACA GGA GCG GCA TCC ACA GGA GTG GGA GGC CAA GTT AGT				
Thr Gly Ala Ala Ser Thr Gly Val Gly Gly Gln Val Ser				
1886	1895	1904	1913	
GTA AAT ATG CCT CTT CAG AAA ACT ATG GAA ATA GGG GAG				
Val Asn MET Pro Leu Gln Lys Thr MET Glu Ile Gly Glu				
1922	1931	1940	1949	1958
AAC TTA ACA TCT AGA ACA TTT AGA TAT ACC GAT TTT AGT				
Asn Leu Thr Ser Arg Thr Phe Arg Tyr Thr Asp Phe Ser				

FIG. 14I

1967	1976	1985	1994	
AAT CCT TTT TCA TTT AGA GCT AAT CCA GAT ATA ATT GGG				
Asn Pro Phe Ser Phe Arg Ala Asn Pro Asp Ile Ile Gly				
2003	2012	2021	2030	
ATA AGT GAA CAA CCT CTA TTT GGT GCA GGT TCT ATT AGT				
Ile Ser Glu Gln Pro Leu Phe Gly Ala Gly Ser Ile Ser				
2039	2048	2057	2066	2075
AGC GGT GAA CTT TAT ATA GAT AAA ATT GAA ATT ATT CTA				
Ser Gly Glu Leu Tyr Ile Asp Lys Ile Glu Ile Ile Leu				
2084	2093	2102	2111	
GCA GAT GCA ACA TTT GAA GCA GAA TCT GAT TTA GAA AGA				
Ala Asp Ala Thr Phe Glu Ala Glu Ser Asp Leu Glu Arg				
2120	2129	2138	2147	
GCA CAA AAG GCG GTG AAT GCC CTG TTT ACT TCT TCC AAT				
Ala Gln Lys Ala Val Asn Ala Leu Phe Thr Ser Ser Asn				
2156	2165	2174	2183	2192
CAA ATC GGG TTA AAA ACC GAT GTG ACG GAT TAT CAT ATT				
Gln Ile Gly Leu Lys Thr Asp Val Thr Asp Tyr His Ile				

FIG. 14J

2201	2210	2219	2228	
GAT CAA GTA TCC AAT TTA GTG GAT TGT TTA TCA GAT GAA				
Asp Gln Val Ser Asn Leu Val Asp Cys Leu Ser Asp Glu				
2237	2246	2255	2264	
TTT TGT CTG GAT GAA AAG CGA GAA TTG TCC GAG AAA GTC				
Phe Cys Leu Asp Glu Lys Arg Glu Leu Ser Glu Lys Val				
2273	2282	2291	2300	2309
AAA CAT GCG AAG CGA CTC AGT GAT GAG CGG AAT TTA CTT				
Lys His Ala Lys Arg Leu Ser Asp Glu Arg Asn Leu Leu				
2318	2327	2336	2345	
CAA GAT CCA AAC TTC AGA GGG ATC AAT AGA CAA CCA GAC				
Gln Asp Pro Asn Phe Arg Gly Ile Asn Arg Gln Pro Asp				
2354	2363	2372	2381	
CGT GGC TGG AGA GGA AGT ACA GAT ATT ACC ATC CAA GGA				
Arg Gly Trp Arg Gly Ser Thr Asp Ile Thr Ile Gln Gly				
2390	2399	2408	2417	2426
GGA GAT GAC GTA TTC AAA GAG AAT TAC GTC ACA CTA CCG				
Gly Asp Asp Val Phe Lys Glu Asn Tyr Val Thr Leu Pro				

FIG. 14K

2435	2444	2453	2462	
GGT ACC GTT GAT GAG TGC TAT CCA ACG TAT TTA TAT CAG				
Gly Thr Val Asp Glu Cys Tyr Pro Thr Tyr Leu Tyr Gln				
2471	2480	2489	2498	
AAA ATA GAT GAG TCG AAA TTA AAA GCT TAT ACC CGT TAT				
Lys Ile Asp Glu Ser Lys Leu Lys Ala Tyr Thr Arg Tyr				
2507	2516	2525	2534	2543
GAA TTA AGA GGG TAT ATC GAA GAT AGT CAA GAC TTA GAA				
Glu Leu Arg Gly Tyr Ile Glu Asp Ser Gln Asp Leu Glu				
2552	2561	2570	2579	
ATC TAT TTG ATC CGT TAC AAT GCA AAA CAC GAA ATA GTA				
Ile Tyr Leu Ile Arg Tyr Asn Ala Lys His Glu Ile Val				
2588	2597	2606	2615	
AAT GTG CCA GGC ACG GGT TCC TTA TGG CCG CTT TCA GCC				
Asn Val Pro Gly Thr Gly Ser Leu Trp Pro Leu Ser Ala				
2624	2633	2642	2651	2660
CAA AGT CCA ATC GGA AAG TGT GGA GAA CCG AAT CGA TGC				
Gln Ser Pro Ile Gly Lys Cys Gly Glu Pro Asn Arg Cys				

FIG. 14L

2669	2678	2687	2696	
GCG CCA CAC CTT GAA TGG AAT CCT GAT CTA GAT TGT TCC				
Ala Pro His Leu Glu Trp Asn Pro Asp Leu Asp Cys Ser				
2705	2714	2723	2732	
TGC AGA GAC GGG GAA AAA TGT GCA CAT CAT TCC CAT CAT				
Cys Arg Asp Gly Glu Lys Cys Ala His His Ser His His				
2741	2750	2759	2768	2777
TTC ACC TTG GAT ATT GAT GTT GGA TGT ACA GAC TTA AAT				
Phe Thr Leu Asp Ile Asp Val Gly Cys Thr Asp Leu Asn				
2786	2795	2804	2813	
GAG GAC TTA GGT GTA TGG GTG ATA TTC AAG ATT AAG ACG				
Glu Asp Leu Gly Val Trp Val Ile Phe Lys Ile Lys Thr				
2822	2831	2840	2849	
CAA GAT GGC CAT GCA AGA CTA GGG AAT CTA GAG TTT CTC				
Gln Asp Gly His Ala Arg Leu Gly Asn Leu Glu Phe Leu				
2858	2867	2876	2885	2894
GAA GAG AAA CCA TTA TTA GGG GAA GCA CTA GCT CGT GTG				
Glu Glu Lys Pro Leu Leu Gly Glu Ala Leu Ala Arg Val				

FIG. 14M

2903	2912	2921	2930	
AAA AGA GCG GAG AAG AAG TGG AGA GAC AAA CGA GAG AAA				
Lys Arg Ala Glu Lys Lys Trp Arg Asp Lys Arg Glu Lys				
2939	2948	2957	2966	
CTG CAG TTG GAA ACA AAT ATT GTT TAT AAA GAG GCA AAA				
Leu Gln Leu Glu Thr Asn Ile Val Tyr Lys Glu Ala Lys				
2975	2984	2993	3002	3011
GAA TCT GTA GAT GCT TTA TTT GTA AAC TCT CAA TAT GAT				
Glu Ser Val Asp Ala Leu Phe Val Asn Ser Gln Tyr Asp				
3020	3029	3038	3047	
AGA TTA CAA GTG GAT ACG AAC ATC GCG ATG ATT CAT GCG				
Arg Leu Gln Val Asp Thr Asn Ile Ala MET Ile His Ala				
3056	3065	3074	3083	
GCA GAT AAA CGC GTT CAT AGA ATC CGG GAA GCG TAT CTG				
Ala Asp Lys Arg Val His Arg Ile Arg Glu Ala Tyr Leu				
3092	3101	3110	3119	3128
CCA GAG TTG TCT GTG ATT CCA GGT GTC AAT GCG GCC ATT				
Pro Glu Leu Ser Val Ile Pro Gly Val Asn Ala Ala Ile				

FIG. 14N

3137	3146	3155	3164									
TTC	GAA	GAA	TTA	GAG	GGA	CGT	ATT	TTT	ACA	GCG	TAT	TCC
Phe	Glu	Glu	Leu	Glu	Gly	Arg	Ile	Phe	Thr	Ala	Tyr	Ser
3173	3182	3191	3200									
TTA	TAT	GAT	GCG	AGA	AAT	GTC	ATT	AAA	AAT	GGC	GAT	TTC
Leu	Tyr	Asp	Ala	Arg	Asn	Val	Ile	Lys	Asn	Gly	Asp	Phe
3209	3218	3227	3236	3245								
AAT	AAT	GGC	TTA	TTA	TGC	TGG	AAC	GTG	AAA	GGT	CAT	GTA
Asn	Asn	Gly	Leu	Leu	Cys	Trp	Asn	Val	Lys	Gly	His	Val
3254	3263	3272	3281									
GAT	GTA	GAA	GAG	CAA	AAC	AAC	CAC	CGT	TCG	GTC	CTT	GTT
Asp	Val	Glu	Glu	Gln	Asn	Asn	His	Arg	Ser	Val	Leu	Val
3290	3299	3308	3317									
ATC	CCA	GAA	TGG	GAG	GCA	GAA	GTG	TCA	CAA	GAG	GTT	CGT
Ile	Pro	Glu	Trp	Glu	Ala	Glu	Val	Ser	Gln	Glu	Val	Arg
3326	3335	3344	3353	3362								
GTC	TGT	CCA	GGT	CGT	GGC	TAT	ATC	CTT	CGT	GTC	ACA	GCA
Val	Cys	Pro	Gly	Arg	Gly	Tyr	Ile	Leu	Arg	Val	Thr	Ala

FIG. 14P

3371	3380	3389	3398	
TAT AAA GAG GGA TAT GGA GAG GGC TGC GTA ACG ATC CAT				
Tyr Lys Glu Gly Tyr Gly Glu Gly Cys Val Thr Ile His				
3407	3416	3425	3434	
GAG ATC GAA GAC AAT ACA GAC GAA CTG AAA TTC AGC AAC				
Glu Ile Glu Asp Asn Thr Asp Glu Leu Lys Phe Ser Asn				
3443	3452	3461	3470	3479
TGT GTA GAA GAG GAA GTA TAT CCA AAC AAC ACA GTA ACG				
Cys Val Glu Glu Glu Val Tyr Pro Asn Asn Thr Val Thr				
3488	3497	3506	3515	
TGT AAT AAT TAT ACT GGG ACT CAA GAA GAA TAT GAG GGT				
Cys Asn Asn Tyr Thr Gly Thr Gln Glu Glu Tyr Glu Gly				
3524	3533	3542	3551	
ACG TAC ACT TCT CGT AAT CAA GGA TAT GAC GAA GCC TAT				
Thr Tyr Thr Ser Arg Asn Gln Gly Tyr Asp Glu Ala Tyr				
3560	3569	3578	3587	3596
GGT AAT AAC CCT TCC GTA CCA GCT GAT TAC GCT TCA GTC				
Gly Asn Asn Pro Ser Val Pro Ala Asp Tyr Ala Ser Val				

FIG. 14Q

3605	3614	3623	3632	
TAT GAA GAA AAA TCG	TAT ACA GAT GGA CGA	AGA GAG AAT		
Tyr Glu Glu Lys Ser	Tyr Thr Asp Gly Arg Arg	Glu Asn		
3641	3650	3659	3668	
CCT TGT GAA TCT AAC	AGA GGC TAT GGG GAT	TAC ACA CCA		
Pro Cys Glu Ser Asn	Arg Gly Tyr Gly Asp Tyr Thr	Pro		
3677	3686	3695	3704	3713
CTA CCG GCT GGT TAT	GTA ACA AAG GAT TTA	GAG TAC TTC		
Leu Pro Ala Gly Tyr	Val Thr Lys Asp Leu	Glu Tyr Phe		
3722	3731	3740	3749	
CCA GAG ACC GAT AAG	GTA TGG ATT GAG ATC	GGA GAA ACA		
Pro Glu Thr Asp Lys	Val Trp Ile Glu Ile	Gly Glu Thr		
3758	3767	3776	3785	
GAA GGA ACA TTC ATC	GTG GAT AGC GTG GAA	TTA CTC CTT		
Glu Gly Thr Phe Ile	Val Asp Ser Val Glu	Leu Leu Leu		
3794	3803	3813	3823	3833
ATG GAG GAA TAA	GATACGTTAT AAAATGTAAC	GTATGCAAAT		
MET Glu Glu				

FIG. 14R

3843 3853 3863 3873 3883
AAAGAATGAT TACTGACCTA TATTAACAGA TAAATAAGAA AATTTTTATA

3893 3903 3913 3923
CGAATAAAAA ACGGACATCA CTCTTAAGAG AATGATGTCC

FIG. 15A

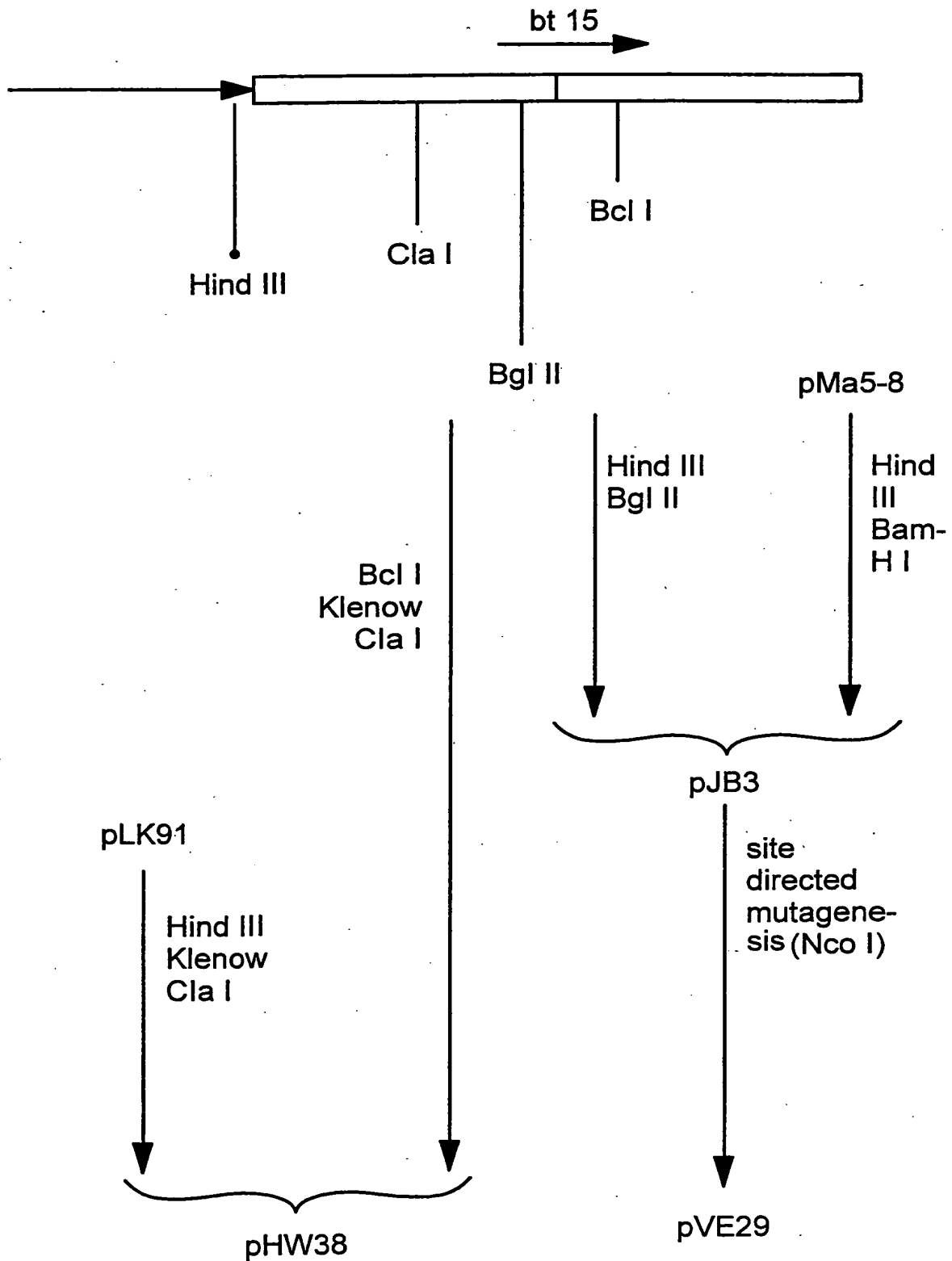


FIG. 15B

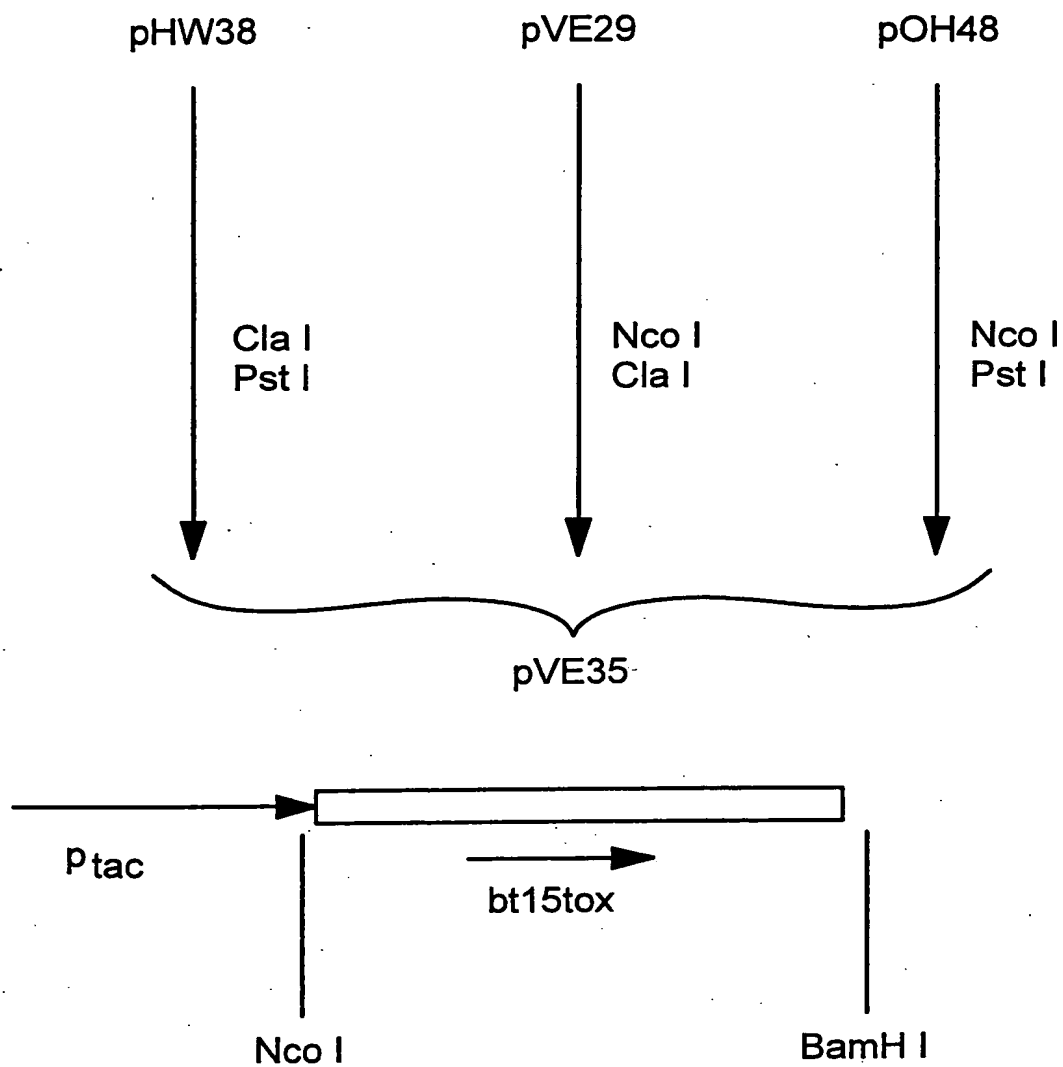


FIG. 15C

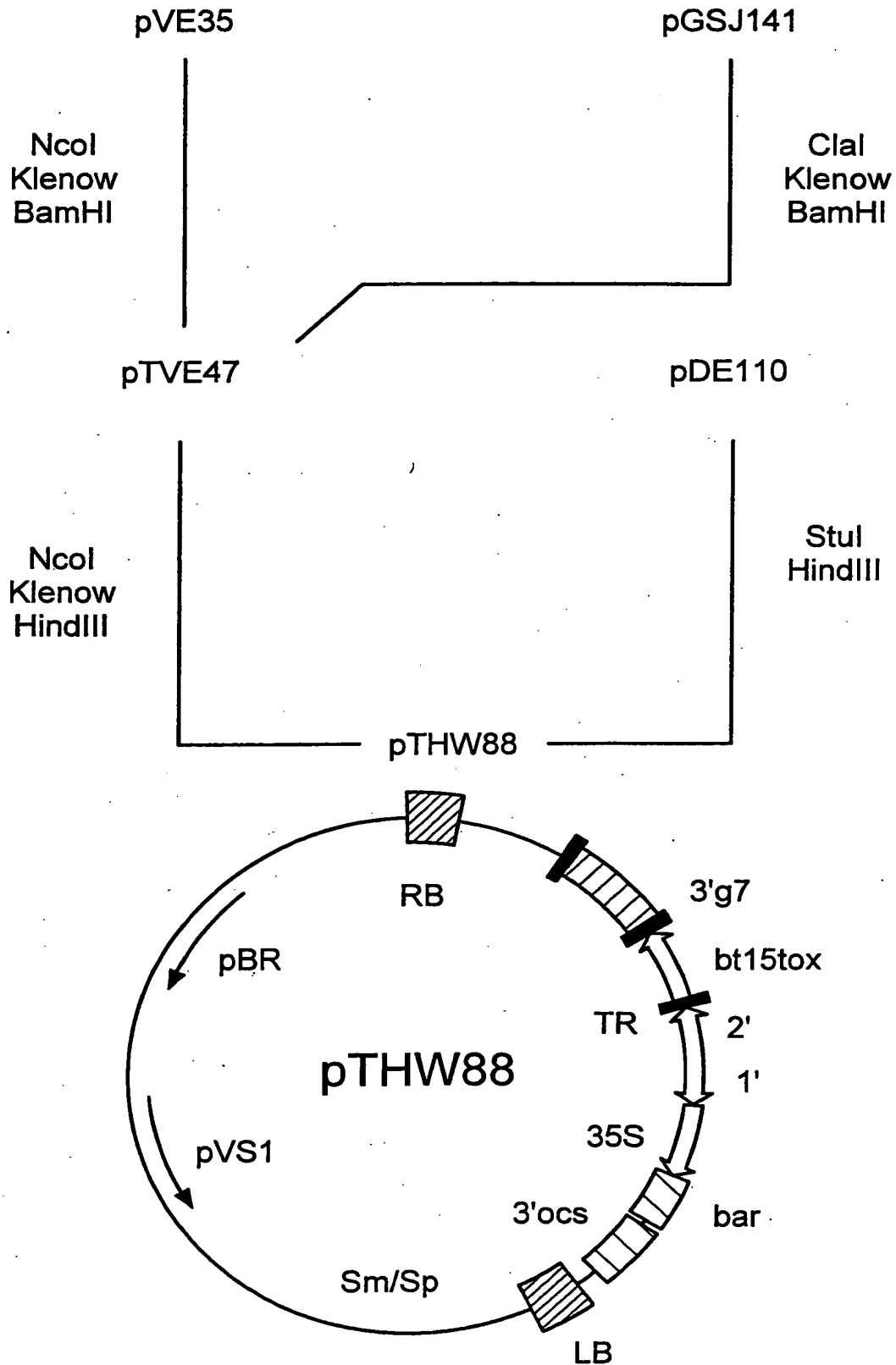


FIG. 16A

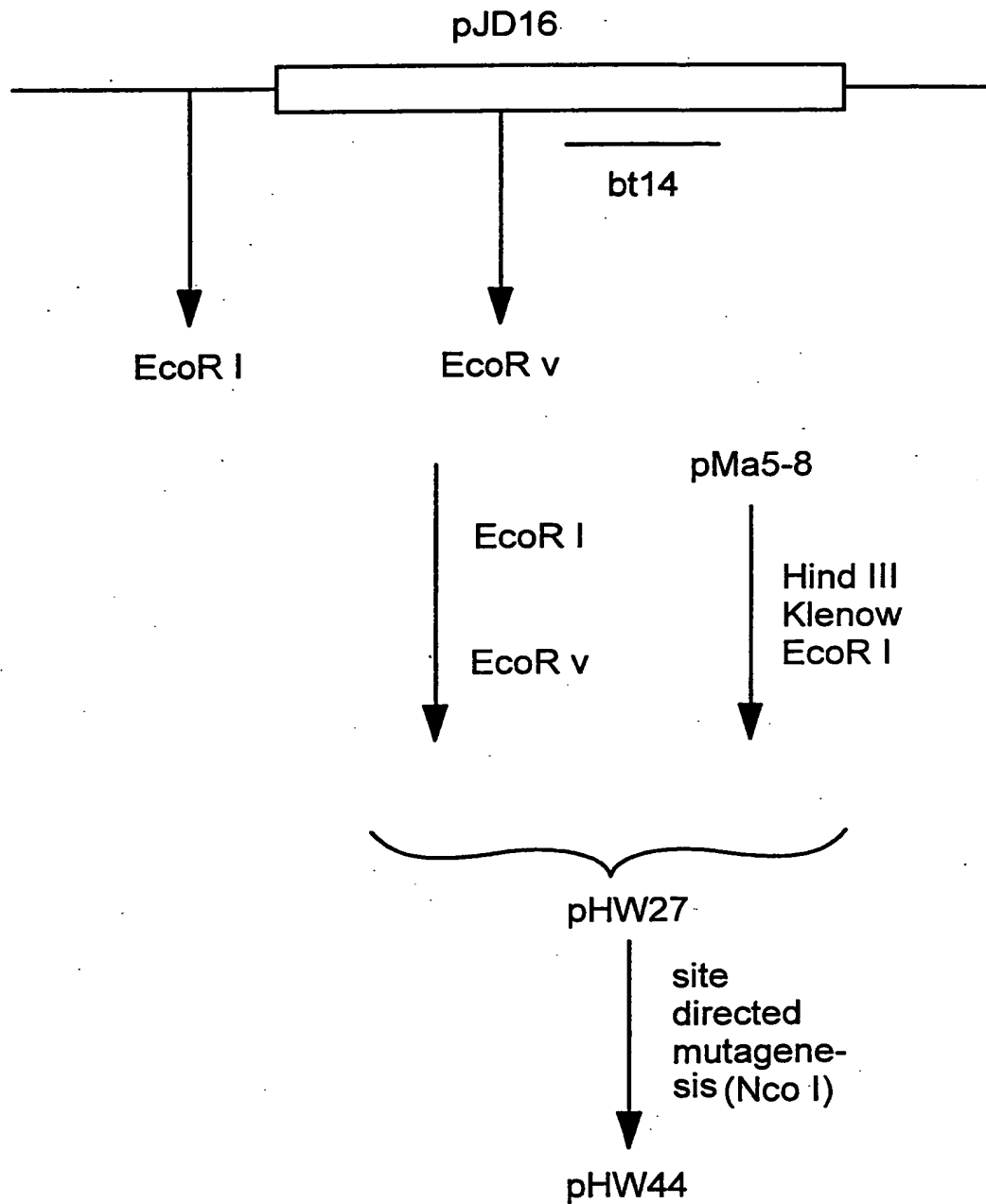


FIG. 16B

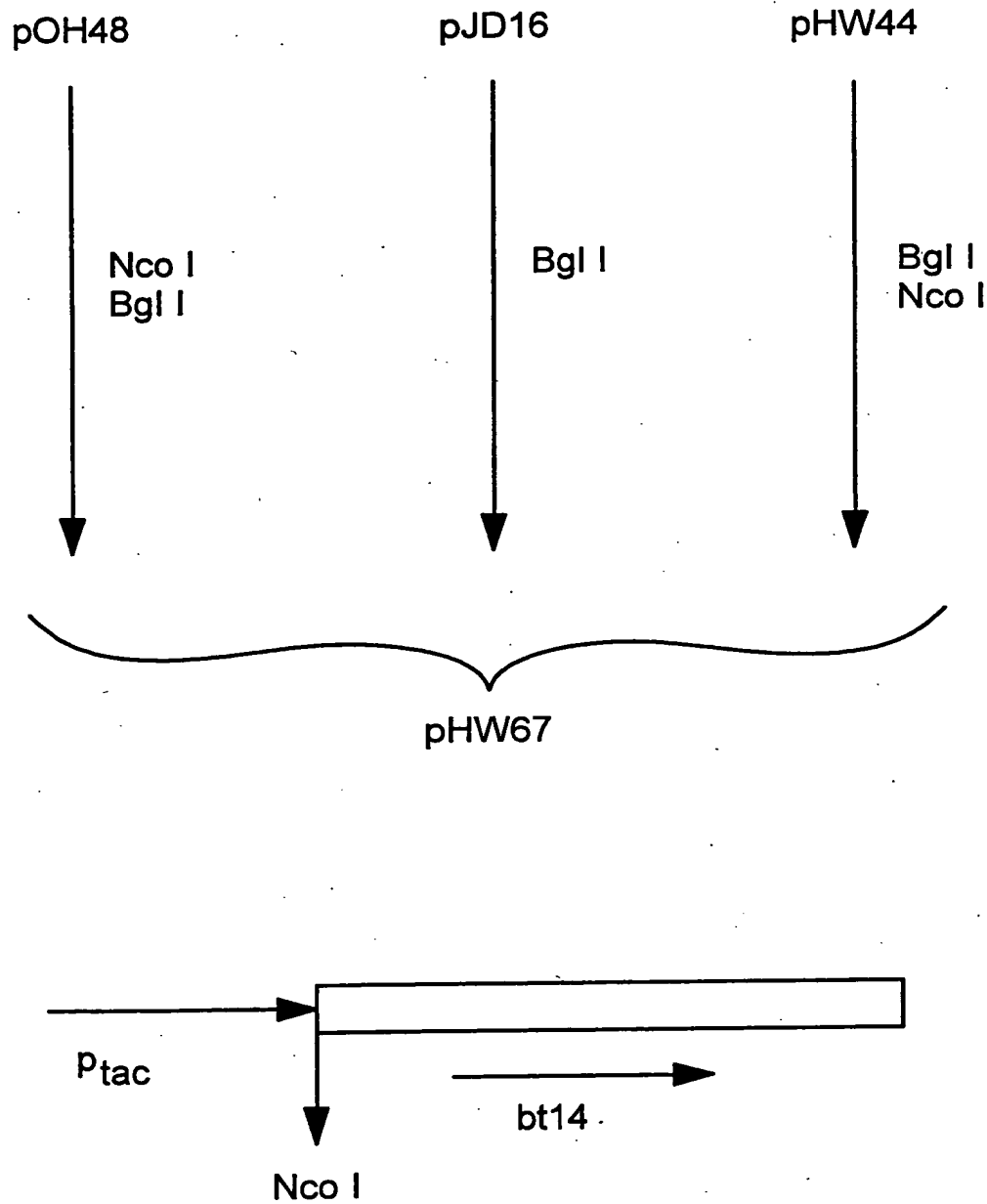


FIG. 16C

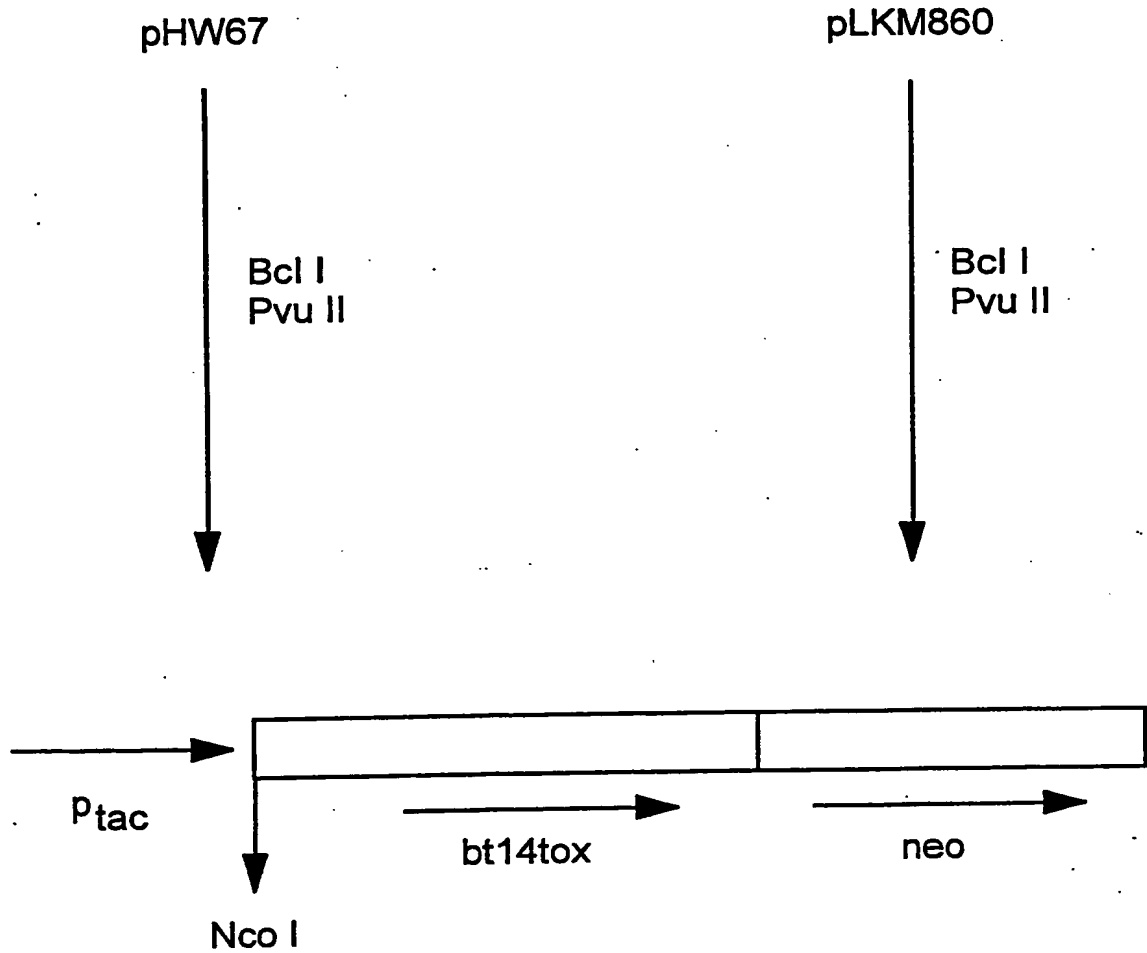


FIG. 16D

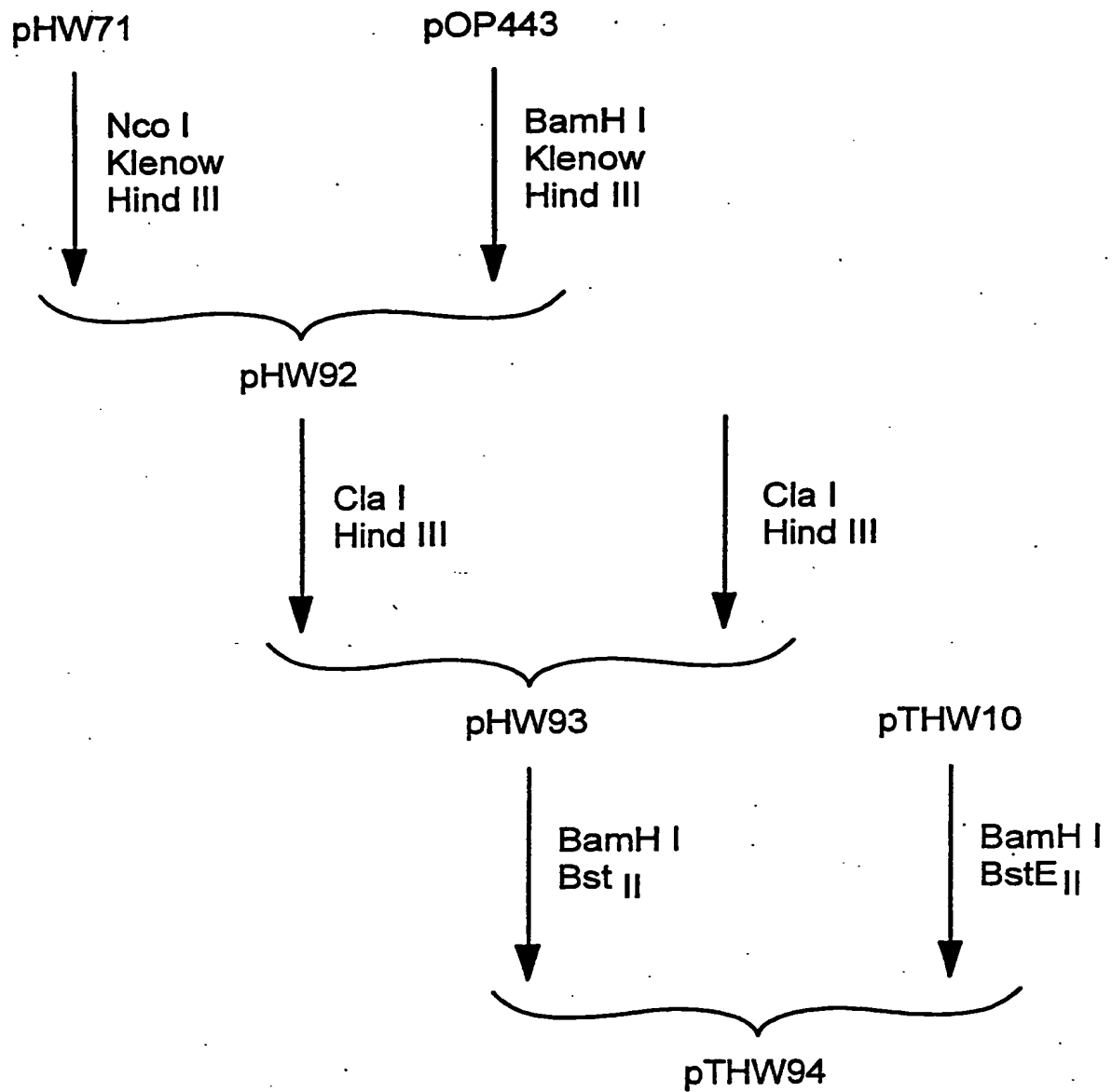
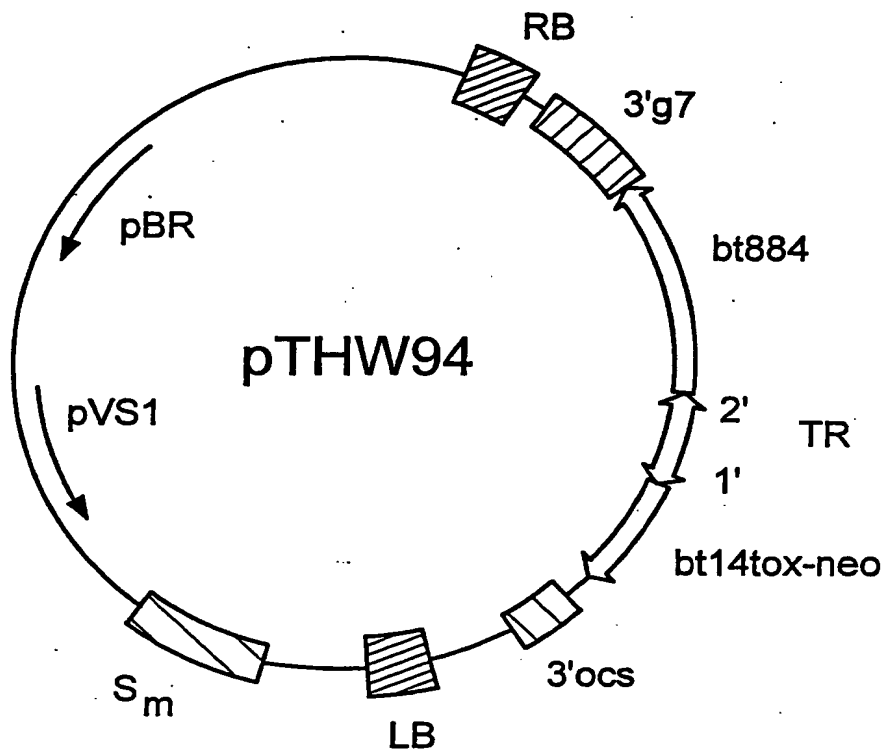


FIG. 16E



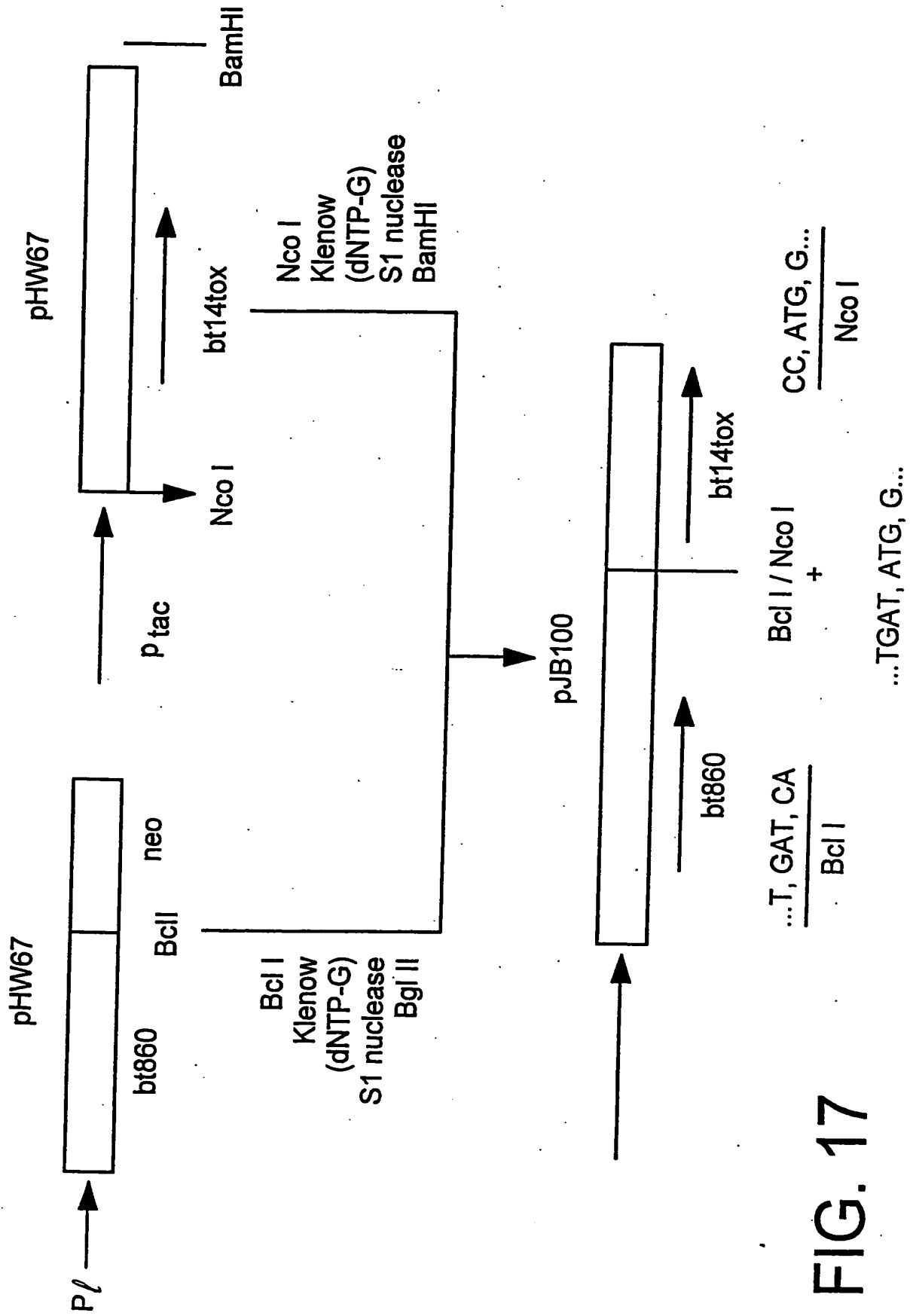


FIG. 17